MOTORAGE

Vol. XLIX Number 5

e

PUBLISHED WEEKLY AT 5 SOUTH WABASH AVENUE CHICAGO, FEBRUARY 4, 1926

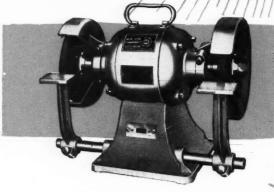
Thirty-five Cents a Copy Three Dollars a Year

All the trade papers heralded the advent of the all-steel, all-vision body as one big significant event of the New York show. The demand for safety is paramount with the public. The great economy is most convincing to manufacturers. I suppose they will all have it before long. Glad we have it now.

Edward S. Jordan

President
Jordan Motor Car Company, Inc.
Cleveland

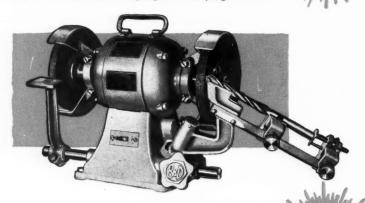
EW MODELS Announced by



New 6" and 8" Electric Bench Grinders at Attractive Prices

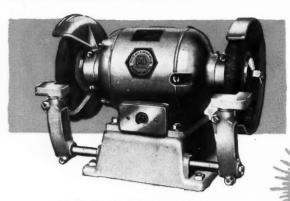
Six-Inch Electric Bench Grinder

Complete with $6'' \times \frac{1}{2}''$ grinding wheels, adjustable wheel guards and tool rests, electric cable fitted with attachment plug and carrying handle.



Six-Inch Twist Drill Grinder

Complete with two wheels, one plain and the other a countersunk wheel for grinding drill bits, adjustable wheel guards, one adjustable tool rest, and twist drill grinding mechanism with micro-meter feed, toggle switch, electric cable fitted with attachment plug and carrying handle.



Eight-Inch Electric Grinder

Complete with two 8" x 34" grinding wheels, adjustable wheel guards and tool rests and toggle switch. (Individual pedestal with water pot, \$18 extra.)



IMPORTANT FEATURES OF THESE **NEW GRINDERS**

These new Grinders are the culmination of years

of experience and study

by skilled engineers and represent a distinct advance in grinder con-

- 1. A superior motor.
- 2. Ball bearings.

struction.

- 3. New heavy duty toggle switch.
- 4. Massive wheel guards, easily and quickly adjustable.
- 5. Improved tool rests, conveniently mounted and easily adjusted.
- 6. Massive base.
- 7. The finish, in keeping with the high quality of the tool, is of baked enamel with nickel trimmings.

Your Jobber Can Supply You

THE BLACK & DECKER MFG. CO. TOWSON, MD., U. S. A.

Black & Decker Mfg. Co., Limited, Toronto, Ont.

ıd

ly

of m-

O.

nt.



HERE are in our files a good many letters which have come to us from friends—from dealers and service men and jobbers—telling us how highly they think of the idea of the Weaver Garage. We feel mighty glad about the letters.

They praise us at length—but also they expect much.

They expect that in this immense proving place we shall devise not only new and even better garage equipment—they expect us to develop short cuts to lower labor costs—new methods of operation—more speed without sacrifice of precision—new economies of shop arrangement and greater garage profit.

The information will be theirs—as soon as it can be made available to them, for ninety percent of our seeking is for facts that will bring new profit to the user of Weaver equipment.

Four New Weaver Equipment Devices

The four new devices shown are the Weaver Quartette, first exhibited at the A. E. A. Show in Chicago. Each contributes an important new help-fulness in automotive service. You'll want to see bulletins which describe them. We're mighty glad to send them, if you will write us. Just a postcard.

Tire Spreader Model "I"

Instantly adjustable for balloon or high pressure tires—any size or style—speeds up repair work—and valuable aid to sales—staunchly made—portable and not heavy—buffing plate holds casing permanently spread for buffing job.

Disc Wheel Truing Attachment*4

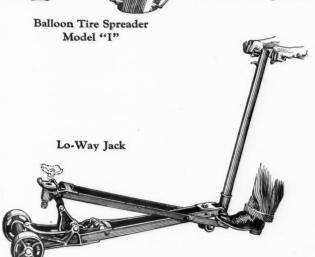
Straightens and trues various types of disc wheels—either permanent or detachable hubs—safe—quick—efficient—a true saver of time and labor—belongs in any modern shop—(attachment for use with Weaver Hi-Speed Press).

Lo-Way Jack

Ideal under balloon tired cars—drops to six inches or raises to seventeen—wheels pivoted by handle—easy to raise, lower or guide—roller and ball bearings throughout—rugged—5000 pounds capacity—steel wheels or rubber tires.

Pressure Vise

Used with Weaver Hi-Speed or Regular Press—handles jobs \(^5\)8" to 2\(^1\)6" diameter—quick adjustable—the greater the pressure the tighter it grips—releases instantly—especially handy for Ford work—husky without bulk.





WEAVER MANUFACTURING CO., Springfield, Ill., U. S. A. Weaver Canadian Co., Ltd., Chatham, Ont.







OIL-REGULATING TYPE 60c and up (One to a piston) COMPRESSION TYPE 30c and up

What is an Oil-Pumper?

△NY motor that uses more than a gallon of oil in 500 miles, at ordinary driving speeds, is an "oil-pumper."

It doesn't have to foul plugs every few miles, and neither does the oil have to run in a stream out of the exhaust pipe, for it to be an "oil-pumper."

If it uses more than a gallon of oil in 500 miles it is an "oil-pumper." And such a waste of oil is needless.

All these motors need is proper oilregulation! And PERFECT CIRCLE Oil-Regulating rings will give it to them. One of these rings on each piston will stop oil-pumping and make possible 1000 or more miles to the gallon of oil. Mail coupon in lower margin for the PERFECT CIRCLE proposition.

INDIANA PISTON RING COMPANY, HAGERSTOWN, INDIANA, U. S. A.

CHARLES N. TEETOR, Vice-President & General Manager Export Sales Department: 549 W. Washington St., Chicago, Ill.

Write name and address in margin and mail for valuable piston ring data.

1926

MOTOR AGE

VOL. XLIX

NO I

JULIAN CHASE, Directing Editor
B. M. IKERT, Technical Editor
A. H. PACKER, Associate Editor
JOHN C. GOURLIE, News Editor
W. L. CARVER, Field Editor, Detroit

JAMES C. GRANT, Detroit News Rep.

SAM SHELTON, Editor CLARENCE PHILLIPS, Asst. Editor TOM WILDER, Architectural Editor LESLIE S. GILLETTE, Field Editor, Detroit M. W. BAKER, Asst. News Editor

CONTENTS

Out for New Records		9
Salesmen Swing Into A	ction	10
Home of Success		
	By Tom Wilder	
The Show Technically	Viewed	36
	By B. M. Ikert	
Census of Accessory E	xhibits	38
The Reader's Clearing House		41
Annual Salon a Garden of Color		40
· B	Norman G. Shidle	
1600 at Sales Rally		46
Editorial		47
News of the Industry	***************************************	48-59
Trade Association Activities		
Coming Motor Events		
Specifications		60
CLASSIFIED ADVERT	ISING SECTION	131
INDEX TO ADVERTI	SEMENTS	132-133

MOTOR AGE is published every Thursday by

CHILTON CLASS IOURNAL COMPANY

Mallers Building, 5 South Wabash Avenue, Chicago

C. A. Musselman, President and General Manager J. S. Hildreth, Vice-Pres. and Director of Sales W. I. Ralph, Vice-Pres.

DAVID BEECROFT, Vice-Pres.
A. H. VAUX,

J. H. Collins, Vice-Pres. H. J. REDFIELD,

Secretary and Assistant Treas.

90

Cable Address: Motage, Chicago Telephone: Central 7045

OFFICES

New York—U. P. C. Bldg., 239 West 39th St.; Phone Pennsylvania 0080. Detroit—7338 Woodward Ave.; Phone Empire 4890. Cleveland—540 Guardian Bldg.; Phone Main 6860. Philadelphia—56th and Chestnut Sts.; Phone Sherwood 1424. Indianapolis—519 Merchants Bank Bldg.; Phone Riley 3212.

Owned by United Publishers Corporation, 239 West 39th Street, New York; Charles G. Phillips, President; A. C. Pearson, Vice-President; Fritz J. Frank, Treasurer; H. J. Redfield, Secretary.

SUBSCRIPTION RATES: United States, Mexico and U. S. Possessions, \$3.00 per year; Canada, \$5.00 per year; all other countries in Postal Union, \$6.00 per year; single copies, 35 cents.

Member of the Audit Bureau of Circulations. Member, Associated Business Papers, Inc.

Copyright, 1926, by CHILTON CLASS JOURNAL COMPANY

Subscriptions accepted only from the Automotive Trade

Entered as Second Class Matter, Sept. 19, 1899, at the Post Office at
Chicago, Ill., under Act of March 3, 1879

Saves a Mean Job on a Cold Day!



This is a good time to put TASCO gasoline gauges at the head of the call list. Have your salesmen "ask 'em to buy."

Ford, Chevrolet and Overland owners hate the bother of "measuring" the gas in the tank in cold weather.

Order Type "H" for the new Ford Roadster, Touring and Tudor. Type "C" for the Fordor.

THE AKRON-SELLE COMPANY

"40 Years in Business"
AKRON, OHIO

MAYDWELL & HARTZELL, Inc.
Los Angeles San Francisco
Pacific Coast Distributors

FORDS, CHEVROLETS and OVERLANDS

FOSTORIA



He Notes the Make of Car, Consults the Chart, Phones the Fostoria Distributor—

—and surprises the car owner by telling him how soon he can have that smashed fender replaced with a fine, new Fostoria—

When a car owner drives in with a fender looking like the wreck of the Hesperus, he not only wants action but hopes against hope that you can restore his car to its original beauty. And that is exactly what you do by the Fostoria plan.

The Fostoria distributor in your section is a good man to know. Let us introduce you.

THE FOSTORIA PRESSED STEEL COMPANY FOSTORIA, OHIO, U. S. A.

Re-fendering the easy, profitable FOSTORIA WAY

A Fostoria fender that is an exact replica of the original fender is within a short delivery distance of your garage. You phone the Fostoria distributor — he delivers you put the new fender on pocket the profit and please the car owner.

And it's just as easy as it sounds.

Send for the Fostoria Wall Chart (shown in the illustration) today —right now.

MAIL THIS COUPON NOW

The Fostoria Pressed Steel Co., Dept. B., Fostoria, Ohio.

Please send me in a special mailing tube without folding, the Fostoria Fender Wall Chart.

am not interested in Pumps and Jacks.

Name

City State......

Address

FENDERS · JACKS · PUMPS

5 reasons why the Studebaker franchise grows more valuable every day:

One-Profit Value
Unit-Built Construction
Always Kept Up-to-Date
Used Car Pledge
Lowest Time-Payment Rates



This symbol means that Studebaker prices do not include the profits of outside body-makers

The Boston Studebaker dealer has just retired at the age of 45 with a clean million dollars. He started with next to nothing as a sub-dealer fourteen years ago. He wasn't lucky. He was a good business man with the right franchise.

Fourteen years—one million dollars! We wonder how many automobile dealers who read this will make a million by 1940. One thing is certain—there'll be Studebaker dealers and Studebaker cars then as now, and more people to buy them. Next time you see your banker, ask him what he thinks of Studebaker.

The Studebaker Corporation of America South Bend, Indiana

NEW STUTZ

retail sales at the New York Show break all records of the industry

I hereby certify that a total of 175 retail orders were taken during the week of January 9th-16th inclusive by retail salesmen in the Stutz Exhibits at the Grand Central Palace and at the Hotel Commodore.

Of this total, eighty-six were sold by the Retail Salesmen of the New York Branch; sixty were sold by retail salesmen of Dealers, operating under the New York Branch; twenty-nine were sold by factory officials and road men to individuals residing outside of the territory controlled by the New York Branch.

The total of these retail orders represent a value of \$577.500.

The above does not include contracts or orders received by factory representatives from Dealers outside of the New York Branch territory.

STUTZ MOTOR CAR CO. OF AMERICA. INC.

New York Branch Manager.

Sworn and subscribed to before me this 18th day of January, 1926.

Notary Public, Kings County Kings Co. Clk's No. 423 Reg. No. 7255 Certificate filed in New York County Clerk's No. 673, Register's No. 7479

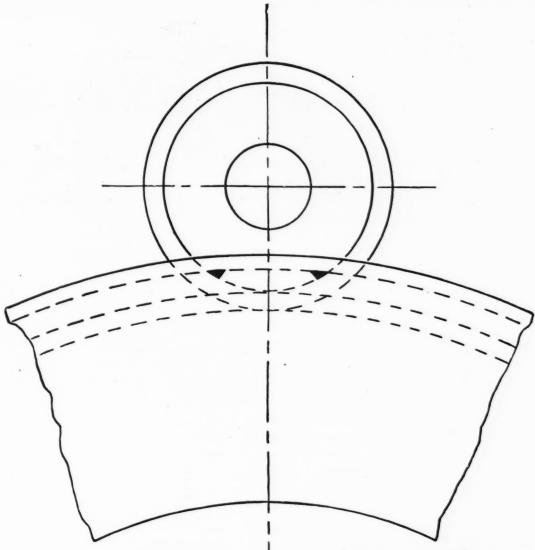
Commission Expires March 30, 1927

OTAR LICENSES

So far as we can ascertain, the figures above represent the greatest money endorsement ever given any car at any automobile show in the history of the industry.



STUTZ MOTOR CAR COMPANY of America, Inc. INDIANAPOLIS



Only in

Only Timken Tapered Roller Bearings have the two-spot contact of rolls and rib which assures positive roll alignment.

Only Timken Tapered Roller Bearings have the unit-stamped precision cage which virtually floats, since its only function is spacing not aligning—the rolls.

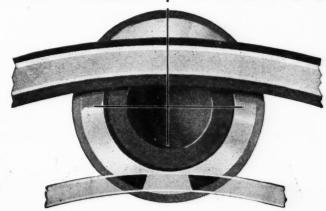
Only Timken Tapered Roller Bearings are

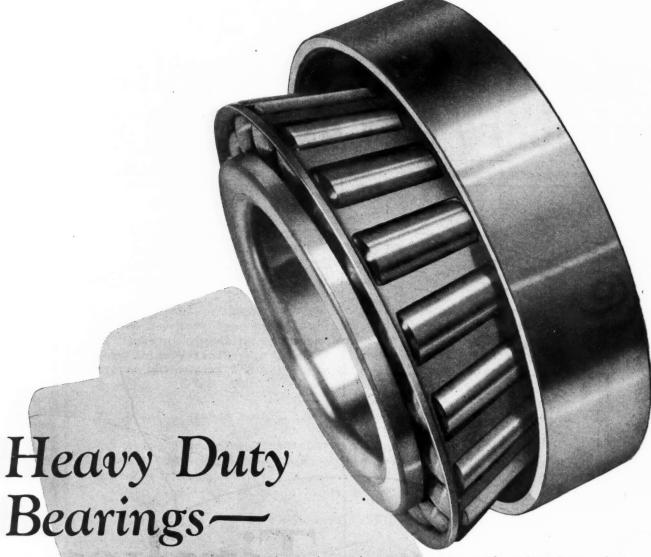
Timkens

made of special Timken electric furnace steel from the Timken steel mill.

Special alloy, special processes, special machinery, and special design pursued to its ultimate development are advantages made possible by Timken resources.

THE TIMKEN ROLLER BEARING CO. C A N T O N , O H I O





THEY must keep running! That's the code of the truck or bus owner. A piece of equipment laid up for repairs when it should be on the road means a definite loss to the business.

Bock Bearings are built on the principle of "Not how many bearings per minute, but how many miles per bearing." A maximum number of taper rollers with round heads provides a tremendous overload

bearing capacity, with extraordinary freedom from friction.

Whether in the 5 ton truck, in the light commercial car built for speed, or in the motor bus, Bock Bearings insure a freedom from trouble that means dividends to the owner and satisfaction with the equipment.

For replacement purposes, Bock Bearings are perfectly interchangeable with other makes. They are sold by authorized distributors everywhere.

THE BOCK BEARING COMPANY, TOLEDO, OHIO



Quality TAPER ROLLER BEARINGS GO,

2 6

Out For New Records

Selling the Big Job at Chicago's Twenty-Sixth National Automobile Show

EW sales records are in the making in Chicago

The occasion is the twenty-sixth National Automobile Show under the auspices of the National Automobile Chamber of Commerce, at the old Coliseum.

The personnel that is busy gathering names on the dotted line is the highly trained, aggressive selling organization of the Chicago retail and wholesale distributing agencies representing the makes of cars on display in the show. This show is in truth a market place, a vast salesroom in which thousands of persons daily gather to admire and compare the newest and the best cars made in America.

Among the thousands of visitors are many plainly and obviously trying to decide upon a new car, and there is always a salesman ready to help the undecided make up his mind. The courtesy of the sales force is marked, the success of the sales effort is encouraging. Showing the effect of intensive training by dealers and distributors, and of the inspiring preshow rally staged by the Chicago Automobile Trade Association on Thursday evening preceding the opening of the show, the sales organizations are at their

The 49 makes of cars on exhibition all have their admirers. The new ones attract the curious and in many cases succeed in creating a permanent interest that ripens into a sale. The well known standard makes of cars that have seen show after show with no startling changes in their makeup, suffer no loss of respect,

but go right on drawing the attention of thousands who will keep right on buying them.

Things that a few years ago were noted as novelties in the show now are standard and almost universal features. Balloon tires are the rule. Pyroxy in finishes are the

rule, although other finishes are to be seen. Enclosed cars predominate in accordance with the trend of the last few years. Those open cars shown are displayed with tops down, and with equipment designed to make of them attractive sport models.

Sales managers almost universally report that the demand is greatest for the four-door sedans. Late developments have brought these models down to low price levels and users have approved them for their comfort and convenience.

From the opening of the show sales were made with a consistency and a regularity that promise much for the future. Most of the Chicago distributing agencies set high sales marks for the week, and indication are these goals will be reached.

Show week in Chicago is usually the occasion of many gatherings of the automotive industry. This year is no exception. The National Automobile Dealers' Association holds its annual convention at the LaSalle Hotel, and many other organizations will hold banquets and meetings.

Measured by the Chicago outlook prospects for the automotive industry are brilliant. Sales are good and dealers are out after new records.



At the Chicago Show

Salesmen Swing into Action

At the

CHICAGO NATIONAL SHOW

Twenty-Sixth Annual Automotive Exhibit Opens with a Rush That Forecasts Good Business Throughout the Middle West

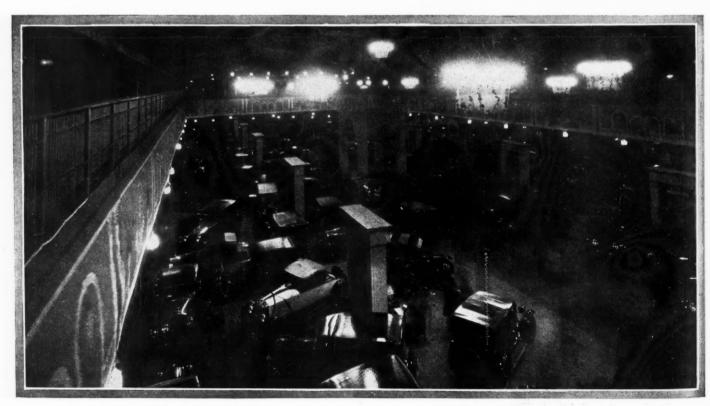
As THE doors of the Coliseum open at 2 o'clock a waiting throng pours steadily through the entrances. Within a few minutes the broad expanse of floor space not occupied by shining cars is filled with people who have come to see the world's newest and best automobiles, and probably to buy. It is a mild afternoon, with sun shining, so different from the usual opening day of the Chicago show. The touch of spring has stirred the motoring blood of Chicago. The ticket sellers are busy.

It is Chicago's twenty-sixth national show. And every one of them has been managed by the same man, the veteran Samuel A. Miles. For some minutes after the doors are opened Mr. Miles stands in an inconspicuous place within the hall, only a few feet from the main entrance, and watches closely to see every detail of the big show is moving smoothly as it is opened to the public. The wonderful system with

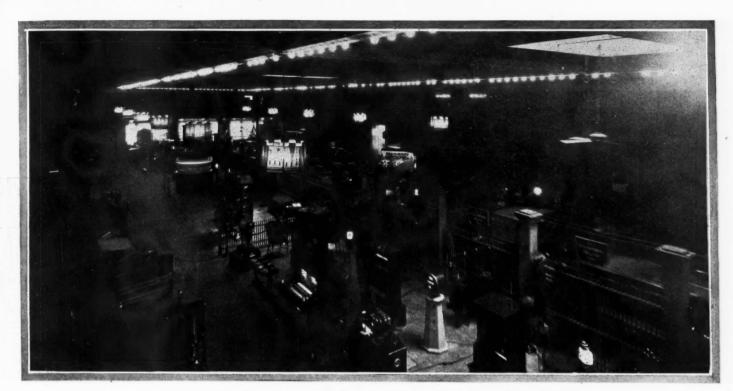
which the national shows operate is not accidental. It is a result of intensive training of his staff by Mr. Miles and careful attention to every detail.

We are among the first to enter. We see Mr. Miles and stop to congratulate him on the auspicious opening of the show. His eyes glow with happiness. We speak of the steady stream of people flowing through the gates. "If it is anything like it was at New York," he says, "the Coliseum won't hold them." We agree that public interest in automobiles seems to be greater than ever.

We hasten on to our assignments. The time is short in which to see and describe the show for Motor Age readers. It must be done before close of the opening day. Every man of our staff knows his appointed task and proceeds quickly to the execution of it. As we proceed we take the reader with us to see the show as we see it, to appraise it from the view-



Chicago's Show photographed as the doors were thrown open to the first day crowd.



Accessory exhibits by 150 manufacturers lined the Coliseum balconies at Chicago.

Dealers Organized for Selling

point of the dealer, to learn what we may about methods of display and selling that appeal most effectively to the public.

Resplendent Setting

In point of vehicles on exhibition the show is much like the New York national show. The setting is different. There the decoration gave the effect of an Italian villa. Here it is a Spanish garden. It seems to us the old Coliseum never looked so well before. It may be the magnificent beauty of the cars, strikingly but harmoniously colored, blending with the decorative scheme, that makes the place appear so well.

Nash has added a new four-door sedan on the specail chassis at \$1,315. There is a new and larger taxicab by Bauer. Hudson shows a taxicab made for Checker. The seven-passenger sedan of Elcar has a new dress and wire wheels. McFarlan shows two new custom built bodies. These observations are quickly made.

The new vehicles, which have been previously described in Motor Age, but which are having their first showing at Chicago, are constantly surrounded by visitors. The Pontiac, created by General Motors, is a new name and a new car. The new Stutz honors an old name. Paige and Jewett, names well known, appear in new form. A new member of the Auburn family is the 4-44. Hupp's new six is there. Ajax, by Nash, appears in the Chicago show for the first time. Chrysler's big "80" is there. Flint now has a Junior in the line. Chevrolet has many improvements. Rickenbacker shows his "Super Sport." Velie has a new engine and new bodies. The Willys-Knight "70" is a newcomer. In fact, in chassis or in bodies nearly every manufacturer has some feature that is having its first Chicago showing.

But let us take them in order and see what each maker of cars is showing and how the Chicago sales organizations are selling them to the public.

Plenty of Salesmen on Duty

AUBURN—The Auburn exhibit occupies the space along the west wall of the Coliseum, north of the main entrance. It contains nine cars representing the three complete lines made by that company. Those models shown are the

four-cylinder coupe and sedan, the six sport roadster, brougham and sedan and the eight sport roadster, coupe brougham and sedan. The eight sport roadster is painted in rich cream, with the characteristic Auburn bevel stripe in black. This car is out in the front of the exhibit where it cannot fail to attract attention.

This booth is well manned with salesmen. There are from eight to ten on duty at all times. One man is constantly on the job with a handful of folders to hand to visitors and open up conversation that may lead to a sale or the listing of a desirable prospect.

The Chicago salesmen have found that the four-door broughams are best sellers in the Auburn line, although there is a good market for the sport roadsters. The sedan in the eight cylinder line also sells well. The other body models, combining beauty and comfort, have a strong appeal to certain classes and are well represented in current sales reports. Auburn also has an exhibit in the Congress Hotel.

VERLAND AND WILLYS-KNIGHT—A stripped chassis of the New Willys-Knight Six known as model 70 is a center of interest in the Willys-Overland exhibit. A factory representative is on hand to point out the mechanical features, calling attention especially to the sleeve-valve engine which delivers astonishing torque for a power plant of its size.

The Willys-Knight cars in the exhibit are the 5-passenger sedan of the "70" model and the 5-passenger sedan of the "66" model.

In the Overland section of the exhibit the standard sedans in both the four and six cylinder lines are shown.

Salesmen in this exhibit wear neat badges which readily identify them for the benefit of visitors. Quality and price are strong talking points. The range of prices and models also enables the salesmen to interest every prospective buyer of a car.

To get all possible benefit from the show the Willys-Overland company has installed a complete exhibit of its full line of cars in a corner store a block north of the Coliseum on Wabash avenue. Thousands of show visitors pass this corner and large signs invite them to view the Willys-Overland show free.

nd

top ow. am

ike m." be

in

ers.

nan

with

ew-

AGE



This photograph shows the car exhibits on the ground floor and the accessories in the balcony. The decorative scheme is plainly shown.

Urge Visitor to Sit In Car

TUTZ—As at New York the Stutz exhibit proves a center of interest. The distinctly new features incorporated in its chassis draw crowds who want them explained and factory men are on hand doing the job very well. There is a cutaway model of the eight cylinder engine, and sample parts, such as crankshaft and camshaft, help to make the public appreciate the engineering developments which make this car so different from anything else on the market. There is also a working model of the brake mechanism. The chassis demonstrator calls attention especially to the worm drive and rear axle arrangement which enable the floor of the car to be brought so near the ground without sacrifice of road clearance.

Salesmen, of whom there are eight or ten constantly on duty, urge every visitor who shows an interest in the car to sit in it. The salesman then calls attention to the ample head room and the wide range of vision from either the front or the back seat. The safety features of the unusually rigid chassis also are emphasized.

The sales organization has been well schooled in the art of closing sales at the booth. Condensed order blanks that can be held in the left hand while one writes are provided and every salesman is provided with blank checks in which the purchaser may write the name of his bank. At 3 p. m., an hour after the opening of the show, several orders and checks are reposing in the coat pocket of Floyd D. Cerf, manager of the Chicago branch. Stutz cars also were exhibited at the Congress Hotel.

Make Special Point On Bodies

LCAR—Three cars comprise the Elcar exhibit. These are the 4-passenger roadster, the 5-passenger sedan and the 7-passenger sedan. The roadster has an auxiliary seat in the rear deck, and is shown to best advantage with the top down. It is one of the chief attractions of the exhibit. The 7-passenger sedan has a new cream colored finish and wire wheels.

Three factory representatives, including W. H. Patterson, vice-president, are on hand. In addition four or five salesmen are there to talk business with prospective buyers. Quality, performance and stability of design are the chief sales arguments.

A special point is made of the bodies, which are built complete in the Elcar factory at Elkhart, Ind.

Sell Them On "Safety"

JORDAN—Safety is a strong talking point in the Jordan exhibit where the full line of series J eight cylinder models are shown. The larger Great Line Eight models are not at the exhibit, but may be seen at the salesroom only a few blocks away.

The three cars in the Jordan exhibit are the Victoria, the

Playboy roadster and the 5-passenger sedan. The roadster is shown with top down, and painted a rich red. This model is intended to appeal to those who love outdoor life.

A safety feature of the closed cars is the all steel Budd body. The salesmen are well supplied with information on the advantages of this type of construction. They point to the narrow corner pillars, the larger glass windows and the great strength of the bodies enabling them to withstand overturning with little or no damage.

Since the introduction of the smaller Jordan Eight last summer, this model has gradually captured a major portion of Jordan sales. The salesmen point out that it is a roomy cars, powerful but not heavy, speed enough for all needs, good looking, safe, and at a price that has its own appeal.

Contacts for Local Salesroom

ROAMER—Two of the Roamer eight cylinder models are sedans, and are representative of the extensive line of exhibited. These are the five and seven passenger models now supplied by this company. The exhibit is designed especially to appeal to persons looking for a car of the type of the new Roamers. The show booth really serves as a contact point and the Chicago salesroom provides a place where all models may be seen by interested prospects.

"Specialization" Is Big Word

RAY—"Specialization" is the big word in merchandising just now by the field forces of Gray Motor Corporation. That is the word which comes in for liberal use by Gray salesmen at the company's booth at the Chicago show. The story which the prospect was told runs something on this order:

"Gray is concentrating all effort on the production of one chassis and one body style, the Model "S" four-door sedan, which lists at \$845 f. o. b., Detroit. Through this concentration Gray is able to pass on to the buyer many substantial benefits in the line of price and excellence. The construction of other models gives Gray no conflicting problems that would obtain under different conditions. There is no robbing Peter to pay Paul. Gray is specializing and Gray will give you the services of a specialist."

Other points are talked by Gray salesmen at the Chicago show, of course, but in "concentration and specialization" is the principal argument. Gasoline economy, comfort, neat, refined appearance, strong construction and mechanical efficiency are among the features stressed at different times. The company shows only two cars and a stripped chassis. Plenty of literature is available for the prospect to pick up if he chose, but it is not flourished under his nose when his mind and thoughts are on the car. That is another place where "concentration" seems a part of Gray's policy.

Stress Rugged Construction

EXINGTON—While "appearance" seems to dominate the selling appeals of many salesmen at the Chicago show first honors at the stand of the Lexington Motor Company are obviously mechanical superiority, performance and ruggedness of construction. This does not mean Lexington salesmen are not prepared to say something also about appearance, for when the occasion arises the beauty and dignity of Lexington cars are sufficiently stressed.

The salesmen, however, get pleasing reactions from their hearers on the elements of mechanical qualities and strong construction and they never fail to capitalize the openings. One important item to which attention is directed in this connection is the double-triangular center cross member which gives extraordinary rigidity to the Lexington frame. Visitors are told that with this feature the body will "stay put" after the car has been long in use, that doors of the old car will fit snugly and correctly as when the car was new, and that with this support the frame is strong enough to throw road shocks to the springs, where they should be absorbed. Among other points Lexington salesmen stress the fact that Lexington's developments are all the results of long experimentation and tests, there being nothing in the car problematical or freakish.

This exhibit consists of three body models on Lexington's well known "6-50" chassis, five passenger landau sedan, four passenger runabout, and the five passenger sedan, all having been displayed at New York.

ARDNER—Among other things Gardner Motor Car Company is selling its cars on appearance. Just how far a salesman should go in selling "appearance" before all other features might give occasion frequently for debate, but one of Gardner's representatives on the floor at the show gave two good reasons why he puts "appearance" first in the selling story.

One of the reasons is that "Gardner's cars have the appearance to sell," and the other is that in his opinion people right now are buying on appearance more than anything else. As a selling proposition his point is to follow the line of least resistance and greatest receptivity and he is convinced that "apearance points the way." And all Gardner salesman hammer on "appearance" as visitors view the samples before them. Besides talking "appearance" they talk performance, comfort and quality generally.

ìf

r

d

e

n-

re

ng

n.

by

w.

on

ne

an,

ra-

ial

lon

uld

ter the

ago

' is

eat, effi-

nes.

sis.

up

his

lace

sell-

first

are

ged-

men

, for

gton

their

rong

ings.

con-

which

sitors

after vill fit

with

hocks

other

gton's

n and

akish.

gton's, four

having

AGE

This is another space where salesmen apparently had been schooled especially to cope with feminine interest. Following her survey of the exterior of a closed model, during which the salesman purposely is silent the woman is invited to inspect the interior. Instead of using a pasting lace to cover raw edges her attention is called to the use of wire molding, that here she can have upholstery in mohair with French pleats—vanity cases, silk corded pull-up grips, silk curtains at side and rear, an upholstery padding which "fills the small of the back"—all good selling stuff for the ladies.

Floor duty at the show was arranged to give all dealers in Cook county an equal chance, the salesmen being drawn from the county dealer organization and working on a divided schedule. The plan provided for a continuous personnel of from four to six men. Gardner's exhibit consisted of a six cylinder four door brougham, six cylinder Anniversary sedan, and three eighths, roadster, cabriolet and imperial sedan. It was the same exhibit seen at New York.

Long Car Life Is One Ace Here

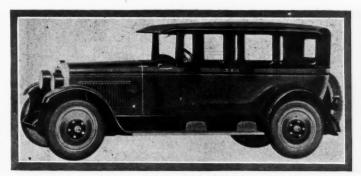
ASE—Salesmen on duty for Case at the Chicago show besides "selling" mechanical excellence in the Case cars make considerable capital of this company's conservatism in body design and color. The fact that the Case policy is not to make frequent changes in the outward appearance of the car they emphasize as a factor which should have a strong appeal to the buyer, that it should not be necessary for a person to buy a new car every third year because of deterioration or the fact that the car begins to have a rather obsolete appearance.

Then they point to figures of a recent survey made by Case which showed that the average life of the Case car is more than eight and a half years. As in the case of selling cars anywhere Case salesmen are called upon to discuss such features as mechanical elements, ease of operation, comfort and finish. There seems to be considerable interest on the part of show patrons in the different types of finish now on cars. On this point Case salesmen tell how the company obtains fine and proven results in the manner of applying lacquer finishes.

Here again those in charge of the show merchandising stress the stability and reliability of the company behind the product. There is plenty of literature at the Case booth and the salesmen are on the watch to note any sign of interest when a visitor reads the printed matter. This is always an opening for the show salesman and the men in this booth are quick to test out any such opportunity. The company's exhibit is the same as in New York, there being a J. I. C. brougham and sedan, both five passenger, and a "Y" seven passenger sedan.

Sell "Practical Sized" Car

AVIS—The "practical sized" car along with popular price constitutes one of the effective selling arguments of salesmen at the space occupied by Davis Motor Car Company. There is a lot that can be said about the "practical sized" car in this day of traffic complications and demand for commodious utility and when this argument is presented in connection with the popular price appeal the prospect is given something for reflection. Following this up Davis salesmen make capital of the high class workmanship in Davis



New Nash Special Six 4-door sedan at \$1315.

models, neat and handsome appearance, comfort, performance and mechanical excellence.

Visitors at the Davis stand also heard something about the long experience this company has had in manufacturing cars, the company having made cars since 1909 and having an enviable record in the manufacturing industry since 1902. Added to this, by way of recommendation, attention is called to the fine financial condition in which the company finds itself today, the point being that its status in car manufacturing is permanent. With no outstanding obligations other than current bills and with a substantial bank reserve Davis, it is said, is well prepared to cater to all wants of its patronage. In other words, these salesmen "sell" the company they represent.

The Davis exhibit consists of three models of the "92" series and two of the "93". Those of the "92" are the Man O' War roadster, Imperial sedan, and the Four Door sedan. Those on the "93" are the three-passenger coupe and the five passenger sedan.

Talk Individual Appeal

CFARLAN—Advantages to be realized through purchase of a custom-built passenger car are expounded by salesmen at the spaces of the McFarlan Motor Corporation in an effective manner. The custom builder's story, of course, is different from that of the strict production manufacturer. McFarland's salesmen stress the appeal to individual tastes and selection, fine appointments, luxury, comfort and mechanical quality.

The exhibit is one of the outstanding displays in the show in that it presents models not shown in New York. One of these is a new business men's or utility coupe and the other a new five passenger brougham. The coupe, which has a rumble seat, is on the eight chassis and is priced at \$3,750, Chicago delivery. The car appears in two shades of green with an orange and red stripe. It is upholstered in Spanish leather, has a compartment behind the seat for luggage, a side door compartment for golf clubs, etc., and a spacious rear deck compartment for which illumination is provided. The coupe carries McFarlan's usual accessories and equipments.

The brougham, also on the eight chassis and priced \$3,750, Chicago delivery, is finished in green with a yellow and black stripe. It is upholstered with gray wool and has an oval rear window and oval quarter windows. The coupe is offered at \$100 less without the rumble seat. In addition to these two bodies the McFarlan display shows a four passenger cabriolet, roadster, four passenger coupe and five passenger sedan—all on the eight chassis.

Ready for Feminine Interest

ILLS SAINTE CLAIRE—Precision of manufacture coupled with the unique design of the Wills Sainte Claire engine, mechanical simplicity and efficiency, power and speed, comfort and easy riding, a comparatively short wheelbased car, variety and beautiful brilliance of lacquer finishes—are some of the high spots in selling appeal used by salesmen for Wills Sainte Claire at the Coliseum.

They meet interest of women by stressing beauty of body design and finish, elegance of appointments and the deep, luxurious cushions. Also they do not fail to call attention to the hammered silverware in enclosed models and the walnut molding, along with the broadcloth upholstery for which they find many recommendations, including ease of cleaning. Of course, the do not overlook the vanities when talking to women



Moon Four Door De Luxe Sedan

nor smoking sets when talking to men. Upon ascertaining that a woman would drive the salesman emphasize ease of handling, "soft" clutch and make a point of hydraulic brakes.

The plan of taking names of persons wanting literature mailed to them is followed at this booth. Such names will be used for later reference in the preparation of prospect files.

Wills Sainte Claire's exhibit is the same as that in New York, the display being composed of custom-built models of the "Vogue" line. They are all sizes, it being thought unnecessary to display eights because bodies and chassis of sixes and eights are identical, the difference being in the engines. The exhibit is composed of a four passenger roadster, with rumble seat, five passenger sedan, four passenger cabriolet roadster with rumble seat, a stripped chassis and a cutaway of the eight cylinder engine.

Feature Engine Economy

OCOMOBILE-Locomobile and the "Junior Locomobile," which is the new designation for the unit produced formerly by the Locomobile Company of America under the name of "Junior Eight"—are shown side by side in the North Hall of the Coliseum. The display is the same as that exhibited in New York, all being special paint jobs. It is the "90" series of Locomobile that makes up this part of the exhibit. The "90" series are custom built, while the "Junior Locomobiles" are production units.

Of the Juniors the company displays the coupe, special roadster, special coach and special brougham, the latter with trunk. Of the Locomobile "90's" there are shown two broughams, five and seven passenger, and the seven passenger limousine. An electrically operated Junior Locomobile cutaway engine was listed for the exhibit but was not installed for the beginning of the show.

Economy of engine, excellence of appointments, variety of color options, the fact that the engine is Miller designed and built by Locomobile, perfections and refinements generally belongs in the Locomobile story to show visitors. that rubber shock insulators have replaced conventional shackles, requiring no shackle bolts and no oiling at that point is one of the arguments, while stress is placed on the various features of these cars that appeal particularly to women. Another thing "sold" to visitors here is the fact that this is Locomobile's twenty-sixth year of successful manufacture. Effort at the Coliseum is supplemented with the use of a glass hooded job on Chicago streets. This attracts much attention.

Exploit Car Plus G. M.

ONTIAC—An exceptionally well organized and alert force of salesmen mans the interests of Pontiac, the new General Motors unit whose cars are being produced by the Oakland division at Pontiac, Mich. When a new car comes on the market the salesman is required to go more into details than in the case of a car already established and in this particular phase of the work the Pontiac men demonstrate ample capacity for the job. The salesmen show their schooling and it is apparent that this schooling was counted on to obtain results at the show.

What did they try to sell? For one thing, Pontiac, itselfthe appeal of a thoroughly constructed and very attractive six cylinder car for \$825 f. o. b. factory. For another thing-General Motors Corporation and its vast resources and experience in motor vehicle building. One visitor who seemed doubt-

ful about the Pontiac's newness was promptly met with a flood of information that obviously told him a lot he did not know about the experimentation and testing which preceded Pontiac's introduction and about the extensive experience of the car's sponsors, General Motors Corporation. The teamwork of the men in this booth is inspiring to anyone interested in show selling methods. There is an abundance of literature where it can be easily picked up, and as in New York visittors are given Pontiac pocket pieces in the form of a coin.

Pontiac's display is the same as in New York, the exhibit consisting of two coaches, two coupes and a cutaway engine.

Company First, Car Next

ISSEL-The Kissel exhibit includes the coupe roadster which was shown at the New York show, this car having a folding top so that it affords all the advantages of both the open and closed car. Other cars at the Kissel booth are the 2 door Special Brougham on the 55 chassis and the De Luxe Brougham on the model 75 8-cylinder chassis.

In selling the Kissel car the fact is brought out that the Kissel company has been in business building high grade automobiles for 191/2 years, the idea being to inspire confidence in the mind of the prospect, selling the concern first and the car secondly. Where occasion demands, however, and the prospect is mechanically inclined, the mechanical points are brought out and the up-to-the-minute engineering refinements of the car are mentioned.

As far as the car is concerned it is sold on the appeal to the demand for luxury, refinement and individuality in a motor car. This is illustrated in the case of the 2 door brougham which lists at \$1,695, but is often sold at a price \$100 higher to those who wish the finer upholstery finished in Chase mohair, this being included with special paint job and sliding

seats at the figure mentoned.

Where prospects manifest interest a demonstration is offered or a catalog is given, depending on circumstances. Circulars are also available on a desk at the back of the exhibit for those who wish them. Four salesmen are on duty during the day with six in the evening, when the crowd is usually greater. The coupe roadster seems to be attracting the most attention and as far as sales are concerned is dividing the honors with the 2 door Brougham.

Point to Mileage Records

HANDLER cars displayed include the Twentieth Century sedan, the 7-passenger sedan, the Metropolitan sedan and the Comrade roadster, there also being a cutaway chassis on display. This is the first time in two years that the Chandler exhibit has included a chassis. The moving parts of engine, transmission and axle are slowly operated by means of an electric motor in the engine crankcase.

In selling Chandler cars attention is called to the mileage records testified to by various chandler owners and the durability and performance built into Chandler cars. extent that chassis details contribute to this result, they are pointed out, mention being made of such items as the One

Shot lubricating system.

Previous to the show the salesmen were instructed in methods to use, so that there would be uniformity in the answers given. Difference in the way a car is operated might make a difference in the gasoline mileage that two drivers might get from the same car, but to avoid pointing this out to the prospect the salesmen are coached to give the same answer. Small circulars are available and are given to



The new Chrysler Imperial Roadster

those who manifest a real interest. They are not scattered promiscuously, however. To the live prospects a demonstration is offered as well as a catalog.

To adequately take care of the crowds and give each visitor the necessary information, ten salesmen are on duty at all times, each man serving eight hours one day and four the next.

The cut open chassis seems to be the drawing card at the Chandler booth while the Twentieth Century sedan is the most popular seller, giving the purchaser a fine closed car at a moderate price.

е

it.

r

of

h

le

ne

0-

in

1e

ne

re

ts

to

a

or

00

se

ng

ed

or

he

er.

ith

ıry

lan

vay

ars

ov-

ted

age

ur-

the

are

One

in

the

ated

two

ting

the

n to

GE

Like Follow Up System

PIERCE-ARROW—At the exhibit of the Pierce Arrow motor car company it is found that six salesmen are available at all times and that literature is not used to any extent. It is felt that the quality of Pierce Arrow cars is widely known and that the follow up system is the best from a sales getting standpoint. Visitors are approached promptly regardless of their appearance, for the wealthy individual is not always the one smartly dressed.

Where interest is manifested, a demonstration is offered and the name of the person is requested. In selling the car the factors of long life and factory experience covering 25 years are pointed out, the salesman being schooled on general points of salesmanship, but not to the extent that the talk is stereotyped or given parrot fashion.

The Sport roadster seems to be the most interesting car at the exhibit, it presenting the most striking appearance, while the sales popularity seems to be divided between this car, the coach and the sedan.

The Pierce Arrow exhibit includes a roadster, coach and 7 passenger sedan on the series 80 chassis and a series 33 enclosed drive limousine.

Quality At Low Cost

HEVROLET—The Chevrolet feature is a cutaway chassis where a demonstrator is constantly on duty explaining to the crowds the various details of the car construction. During the day four men give these chassis talks, each working about an hour at a time.

The other cars displayed are the coupe, Landau sedan, coach and 4 door sedan, there being 28 salesmen on duty at all times to show the features of these cars to those interested. The chassis and demonstrator seem to be quite effective in attracting the attention of those passing by, after which the other salesmen often are able to center the interest on the complete car.

The selling talk centers on quality at low cost and in many cases the quality mechanical features are mentioned in the sales talk. Contrary to the method employed in some booths literature is freely distributed, it also being displayed where visitors can pick it up. Immediate demonstrations are arranged where a prospect indicates willingness to take a ride, for when he can be induced to leave the show, the prospects of closing a deal are much improved.

Prepared for Demonstrations

ADILLAC—One of the most carefully worked out systems of demonstrating is employed by Cadillac, there being three cars in service at all times, keeping a 15-minute schedule between the show and the salesroom, where a complete line of cars is available. Due to the crowded condition around the Coliseum it is difficult to get and keep parking space. For this reason one car is always parked, one is at



Buick Master Six Sedan



Studebaker Special Six Coach

the salesroom and one is in transit. When the car in transit comes to the show, the car parked is ready to move away and as it does so, the car that just arrived takes its place. In this way an unusual type of service is maintained which makes it possible to give demonstrations at any time.

The salesmen are trained in meeting the public and point out the accessibility and simplicity of construction which characterize the Cadillac, the power at low speed and the riding qualities being also stressed. Five salesmen are on duty at the booth at all times.

The exhibit includes a 5 passenger custom built phaeton, a 7 passenger Imperial limousine, a 7 passenger standard sedan, a 5 passengar custom coupe and a cutaway chassis, the latter attracting a dreat deal of attention. At the chassis is a man capable of bringing out the fine points of the car's construction and capable of answering the various questions asked by those interested.

Instead of handing out a catalog a request is made for permission to mail one and this makes it possible to get the name and address of the prospect so that further follow up work can be carried on.

Unified Selling Methods

Buick—Buick displays a 7 passenger Master six sedan, a 5 passenger Master six sedan, a 5 passenger Standard six sedan, and a 4 passenger Standard coupe. A chassis is also shown.

In selling Buick cars the mechanical features are pointed out, such as the valve in head construction used in the world's fastest racing cars. The comfort and refinement of the Fisher bodies are points also used in the sales talks, the selling methods being unified among the various men due to frequent meetings held prior to the show.

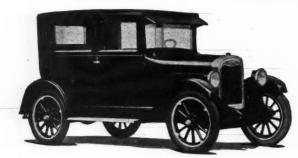
Few demonstrations are made unless by special request, the implication being made that Buick performance is well known and that the question is one of being able to make delivery by the time the prospect wants his car. Instead of handing out catalogs, the name is requested and literature is sent by mail. Ten salesmen are used in the Buick selling plan, there also being a retail manager and a wholesale man to talk to dealers from out of town. Interest at the booth centers in the chassis but sales are said to be divided between various closed models.

Prepared for Trade-In Haggler

ACKARD—Flood lights which appeared to have about 100-watt bulbs are used at the Packard exhibit to show the closed car interiors to advantage. These give a soft diffused light which shows up the attractive features of the interior. The models shown are the Deitrich 4 passenger sedan on the 243 chassis, the Deitrich 4 passenger convertible coupe on the 243 chassis, the standard sport phaeton on the 243 chassi and the tandard 5 passenger six cylinder sedan on the 326 chassis.

Before the show five meetings for salesmen were held in order to coordinate their efforts as well as bring out the points that would be of most value in sales talks. When the prospect brings up the question of the value of his old car, an effort is made to give him a demonstration in order to thoroughly sell him on the new car, rather than bid for the old one. In this way it is easier to take the car in at a price at which it can be properly handled. When requested a catalog is given.

Because of its novelty and because it is suitable for both winter and summer driving, the convertible coupe seems to be attracting the most attention, although the best selling model seems to be the 5 passenger 6-cylinder sedan, this being



The Improved Chevrolet

a comparatively low priced model. In this connection it is interesting to note that approximately 90 per cent of the Packard business is in closed cars.

"One Profit" Plan In This Story

TUDEBAKER—The Studebaker portion of the show includes a 5 passenger Big Six sedan on the 120 in. wheelbase chassis, a sport roadster on the Big Six chassis, a Standard Six coach, a Standard Six sedan and a Special Coach.

Selling efforts are centered on the idea of a car built about 95 per cent under one management, the idea being stressed that unified manufacturing makes possible more car for the money or a car built with the idea of making one profit instead of several.

The salesmen have the advantage offered by a factory sales course which makes for uniformity in sales efforts and prevents a prospect getting one sort of an answer from one man and a quite different answer from another. Literature is mailed rather than being handed out in order to get the individual's name and address. In addition to making this effort to interest the prospect, a demonstration is offered where this seems advisable. The most popular car seems to be the new Standard Six coach, this being the lowest priced 5 passenger closed car in the Studebaker line.

Salesmen Intensively Trained

HRYSLER—Chrysler is showing the 7 passenger Imperial sedan, the 2 passenger Imperial 80 roadster with rumble seat, the 70 Royal sedan, the 58 standard sedan and a cutaway Imperial chassis, the latter attracting much attention.

In talking about the Imperial car, the salesmen refer to the utmost in luxury which this car affords, items contributing to this being the rubber shock insulators used in place of the conventional spring shackles, also the rubber supports used for engine and transmission.

Efforts to train the salesmen and co-ordinate their efforts are shown in the diamond studded pins many of them are wearing, these having been given by the Chicago distributor after a two months sales effort which included a school and record of the men's accomplishments in actual sales.

In quantity sales the 5 passenger seems to predominate, this being true in all models, but it is also interesting to note that the roadster sales run from 15 to 18 per cent of the total production. Chrysler also has an exhibit at the Congress hotel. It consists of 14 body models and three chassis.

Tell of Maker's Reliability

Hupmobile are the De Luxe 5 passenger sedan on the large 8 cylinder chassis, also the De Luxe 3 passenger coupe with rumble seat, also on this chassis. In the six cylinder line there are two sedans, both for 5 passengers, but with different finish. A six cylinder chassis is displayed but this is not cutaway.

Hupmobile sales talks bring out the reliability of the concern behind the car, mentioning specifically the 17 years of manufacturing experience and the reputation of the company. The reputation of the local distributor is also being used as a sales asset.

Twenty salesmen are on the floor at all times, this giving four to a car so that no prospect who is really interested in Hupmobiles need go away from the exhibit without getting a thorough idea of Hupmobile cars and Hupmobile ideals.

Interest of the crowd centers around the six cylinder chassis while sales records seem to show that the 6 cylinder sedan is the most popular in the Hupmobile line.

LINT—The Flint exhibit consists of a model 60 roadster, model 60 sedan, model 80, 5-passenger sedan, a Junior coach and a model 60 cutaway chassis. The chassis attracts much comment and is used by the salesmen in pointing out the important structural features of the car such as the tubular cross member and engine support and the fact that a seven-bearing crankshaft is used in the engine.

In connection with Flint sales it is interesting to note the policy of the Flint distributor in turning over to the neighborhood dealer all sales, even those that are closed by the wholesaler at the show. This gives support to the local dealer and rewards him for the efforts he makes in maintaining a showroom and in carrying other overhead expense.

Flint literature is freely handed out with the idea that this is an easy way to approach the show visitors and often makes it possible to start a conversation and explain some of the features of Flint cars.

Going a step further in the matter of interesting the prospect a demonstration is offered, four different styles of cars being kept in service between the show room and the automobile show. As in the case with a number of other cars, the 5 passenger sedan seems to be the best seller and meets the motoring need of more individuals than do the other models.

Big Value at Price Asked

AKLAND—Four wheel brakes, oil filter, air cleaner, torsional vibration dampener and such mechanical details seem to form much of the sales appeal made by men at the Oakland booth, the whole theme of the sales effort being the idea of much value for the money. These men are not only trained in regard to the house policy but from time to time have the opportunity of visiting the factory and benefiting by experience of factory representatives.

Cars displayed include the new sport roadster, the Landau sedan coach, coupe and touring car, there also being a sectional chassis. These exhibits are manned by a sales staff capable of keeping twenty men on the floor at all times, these men using circulars freely, giving out those referring to Oakland cars and also a booklet which describes the General Motors activities.

Then when a prospect manifests more than casual interest in any Oakland car a demonstration is offered to be given either at the time or later on to suit the prospect's convenience. In connection with the demonstration given on the spot it is interesting to note that a used car appraiser is also mainained at the show so that the whole deal can be closed while the customer is in a buying mood.

Systematic Prospect Scheme

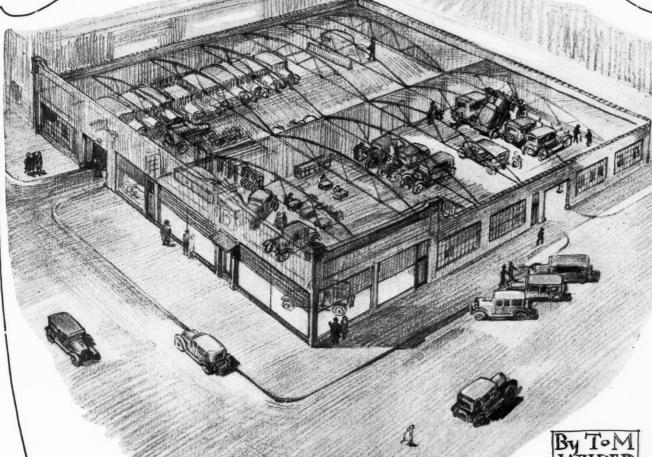
ASH-AJAX—Marshalled under the direct attention of the local distributor sales manager, from 25 to 30 salesmen bedecked with silk badges indicating which of the two chassis is their assignment, interview prospects in the crowded booth of Nash-Ajax.

Unusually large crowds are drawn to the booth by a superimposed exhibit of two stripped, sectional and working chassis—the smaller or Ajax chassis being uppermost. In addition to being adequately lighted, this exhibit is lighted from below so that the working of the underneath parts of the lower Nash chassis can be seen clearly in an inclined mirror on the floor. Attractive silver railings protected the exhibit from the crowds and enabled the lecturer to pass freely about the chassis.

Four complete cars—all of the closed variety—completed the remainder of the exhibits. All five passenger four-door models seemed to create the most interest with the latest addition to the line—shown for the first time at the Chicago show—a four-door sedan on the Nash chassis lising at \$1,315 taking the most attention.

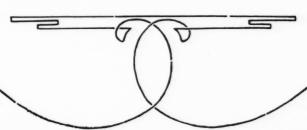
Literature is not to be seen around the booth but is willingly

Story of Chicago Show continued on page 33



The successful automotive establishment of today is planned. One of the first requisites is a suitable business home. In the pages that follow MOTOR AGE gives suggested plans and layouts, based on years of experience and study, for various types of buildings suitable for almost any kind of automotive business. These suggestions will be of interest to all retail automotive dealers.

(Copyright, 1926, by the Chilton Class Journal Co.)



-d

e ct

at ly ıe у au aff se kal

en nnile

he

en wo led ersis ion

ow

ash

or.

vds the

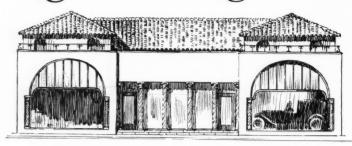
els

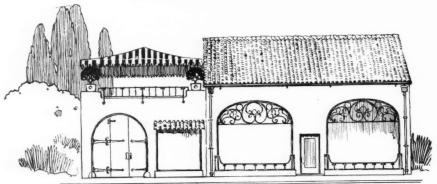
to ur-

the gly

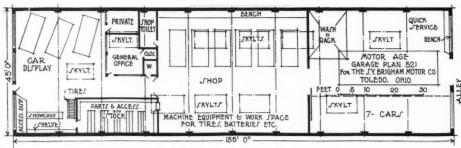
GE

Motor Age Planning Service Helps Many





These are two of several Spanish style elevations designed for one dealer who has felt the urge of the Spanish trend in architecture and wishes to be up to date.



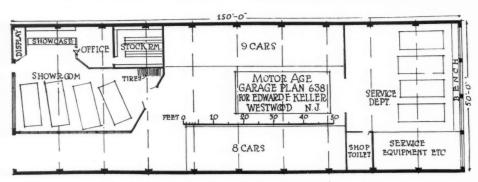
Here the alley behind the building affords the only car entrance.

PLAN 521, above, and 638 below, are good examples of what can be done with a narrow inside lot, providing it has sufficient depth and is not too narrow. No. 521 is fortunate in having a good alley in the rear which can be used by cars in entering the garage and service station. This fact allows the use of the entire frontage for display with a more roomy feeling in the showroom in spite of the fact that this building is 5 ft. narrower than the other.

The shop in this building is in the

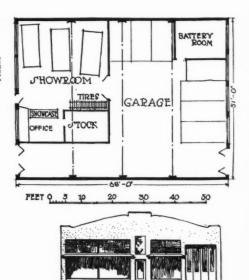
The shop in this building is in the middle directly behind the offices and

stockroom leaving the rear for the garage with an aisle through the center leading to the shop. The width of this building is sufficient for the storage of only small cars if both sides are used, but of course large cars could be stored on one side and the other used for washing and adjustments. Having no side light both these buildings must depend on skylight and skylight arrangement is shown in 521. A similar arrangement would be needed in 638 though not so much since the shop would get part of its light from the back windows.



A layout on a 50 ft. inside lot is not the most ideal a dealer could desire. After the entrance is deducted there is not a great deal of display space left.

ANY dealers recognize the importance of a good looking building. This important business asset, however, is sometimes overlooked, especially in the smaller towns where a snappy building would make more of an impression than it would in a larger place. An unusual building is like a sign hung out in an unexpected place; it is bound to get attention and attention means business. few thousand dollars spent wisely on the exterior of his building is the cheapest advertising the dealer can buy, for it is permanent and active until some other dealer builds something to eclipse it which is not a common occurrence.



THIS small sales room and garage was designed to supplement a service building which is already built beside this site and is only to be used for car and accessory sales and for storing a few new cars and demonstrators. A stucco front was suggested because either cement blocks or hollow tile was to be used in the construction and neither of these is attractive when used as a facing material. Cement blocks are used quite extensively but usage does not make them beautiful and it is better to cover them with stucco which at once gives a better appearance and adds to their strength.

These Designs for Sales and Service

5' 10'

30

It's a strange thing the way different people feel about what is good looking and what is not, but in our opinion and for a very small building to house both sales and service, this is about as "Doggy" a place as we ever saw. There is space to store three cars under a balcony holding the stockroom. There is room for service on four cars with space for service equipment and space in the showroom for two cars, which is going some. The side entrance from the alley is all that makes this lot possible as a site for an automotive building.

By using discretion in designing the interior using some heavy timber trusses with wrought iron ties and mountings and the ceiling above the trusses a very stunning effect could be gotten. The office would be back of an open archway or separated by a wrought iron grill. The windows in the gable would be very effective inside.

ACCESS. DISPLAY

100'0'

We dare anyone to go past this building with his eyes open and in daylight without seeing it, although it is not freakish. SHOP MOTOR AGE OFFICE 3 CARS GARAGE PLAN 559 4 CARS IN FOR E.H. FAHNSTOCK REPAIR GLASSFORD, MOTOR AGE GARAGE PLAN SHOWROOM 608 FOR ILLINOIS SUBSCRIBER MACHINE JKY LT. 7- CARS FEET O

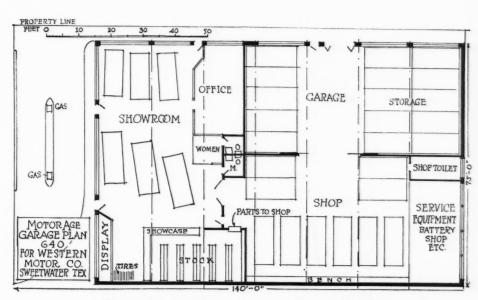
A BOVE is a cozy little plan in which everything is quite complete, even if it is on a small scale. It is not practical here to partition off the shop as partitions always kill more or less space and make it harder to handle cars. By using a glass partition back of the office the whole interior is within view from the office.

CAR DISPLAY

ō

Plan No. 640, to the right, has been asked for by several dealers who think it looks pretty good and they are right too for this is a very well balanced layout for a lot of this size.

The showroom is large; the shop and stockroom are large and there is unusual storage space, although one third of the cars are inaccessible.



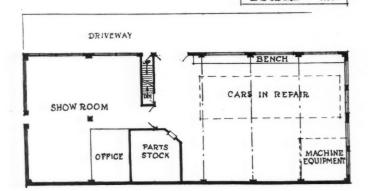
We like this plan because there is so little waste space.

E

Every Dealer Has Individual Problems

THIS should be a very attractive little place where a man could attend to business without being away from home. It also provides the wife, or wives, since there are two apartments, with living rooms they need not be ashamed of.

APARTMENT



N these pages we have a progression from a very small sales and service building with living apartments above to one capable of handling hundreds of thousands—perhaps a million dollars worth of business a year.

In laying out buildings of this kind as the size increases and complications multiply, it is increasingly difficult to find a good arrangement from an economical standpoint. The larger the building the greater the distances and the greater the distances between departments—shop and stockroom, for instance—the greater will be the overhead in waste time.

Besides the waste time is the waste space which must be devoted to aisles as cars must be moved freely between departments and in large buildings the aisles must be spacious to avoid congestion.

ONE is not obliged to think of grease and dirt whenever he thinks of a garage. With a little place like our No. 513 he can think of clean, neat show windows displaying polished, shining cars behind them. He can also think of green roofs and window boxes full of flowering plants—in summer of course, and a cheery fire in the fire place after a hard day's work—that's in the winter.

BATTERN RADIATOR MACHINE EQUIPMENT PAINT THOP ELEVATOR

BELEC THOP CAR AITLE

TOP WORK BENCH

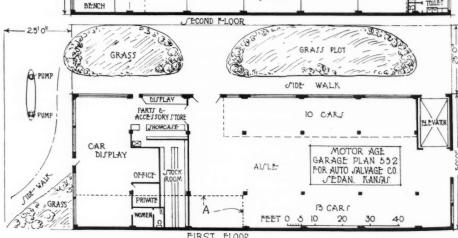
J'ECOND F-LOOR

THIS man was obliged to build 25 ft. back from his line both in front and on the side. That almost ruined his lot for a garage building for we would never advise placing a two story building on anything less than a 50-ft. lot.

However, the layout is fairly good. The aisle in the shop is rather narrow, but still possible. The greatest trouble will probably be getting cars on and off the elevator but space left here across the aisle will help.

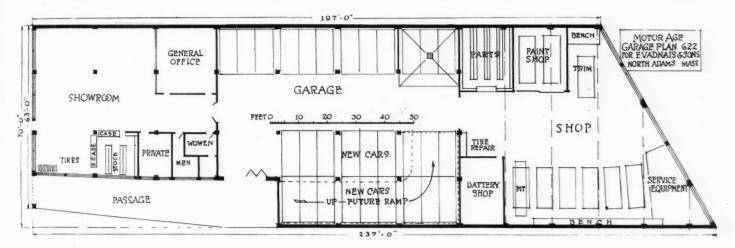
The shop is quite complete with departments for painting and trimming besides the more ordinary lines.

As this building is to be in a residence district the 25-ft. spaces could be planted to grass and shrubs to the delight of the neighbors.



A front entrance would be no advantage here and would take away considerably from the showroom and office as indicated by the dotted line.

Large Buildings Interesting to Design



Plan No. 622 was designed to extend back from the road to the river bank which was along the diagonal side.

BESIDE the layout at the top it will be seen that there are columns arranged so that a second story can be added at a later date. The second story will extend back only to the shop partition, the shop roof being trussed to do away with posts and also to permit the use of ample skylights.

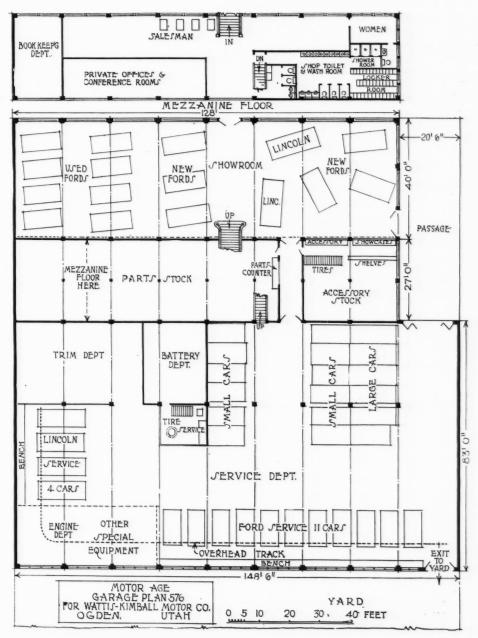
When the second story is added a ramp can be installed as indicated leading directly up from the end of the passage. This space may be used for new car storage or for dead storage until the upper floor and ramp are built.

PLAN 576, to the right, made to fit a lot 148 ft. by 160 ft. is, we believe, quite practical, all around, sales and service scheme for a Ford, Lincoln dealer handling a large volume of business. The sales room is undivided but the part at the extreme left is given over to used car sales. The room could be divided if desired.

A balcony 27 ft. deep extends across the whole building under which is the parts stock and accessory store and stock and upon which are the offices and all toilet rooms both for the shop and offices. Lockers and showers are provided here with plenty of accommodations for a large force.

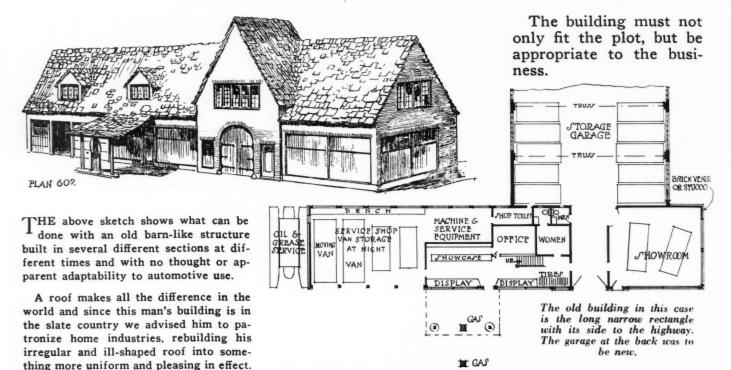
The shop is large and arranged with facilities for Fords and Lincolns which on account of their different sizes need different spaces and different equipment. There is no place for new car stock in this plan, the garage space being barely large enough to handle cars left for service plus a few demonstrators.

The yard at the rear of this building will make up for the limited garage space and later may be built upon.

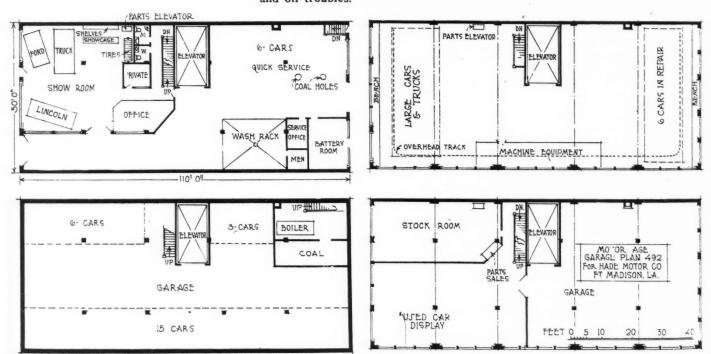


GE

Two Widely Different Types



THIS old shed is too narrow to be of any use as car storage space, consequently we have suggested its use for quick service, for accessory and parts and for office, waiting room and showroom. A passage leading through the main central part gives entrance to the storage garage. Later if a more extensive shop is needed it can be built in the rear of the new part. The small service shop in front is especially good in this hilly country where many of the repairs are brake linings, brake adjustments, tire repair and oil troubles.



THE above is a building with a decided handicap. A dealer doing a considerable business thinks he must build on a small inside lot where to get the necessary floor space he must build up three stories and down one. Here, the best arrangement would give the top floor to the shop because it is the only light floor. The basement, totally dark except for artificial light is good only for car storage. This leaves the main and second floor for the rest of the departments and after a passage from the street

With a covering of slate it would be a

thing of beauty. A veneer of stucco on

metal lath for the walls with red brick

trimmings would complete the trans-

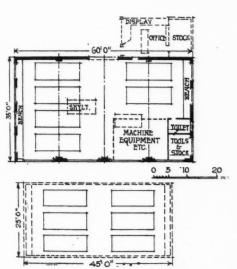
formation.

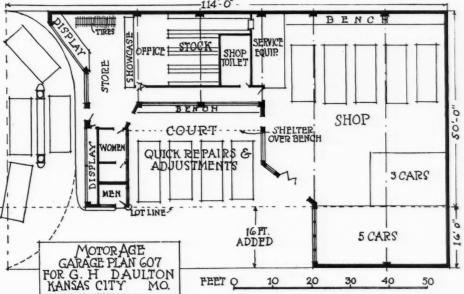
to the alley is provided on the main floor there is little space left here for anything but the necessities.

By locating the stockroom on the second floor the first floor is relieved and retail customers may easily reach the counter via the stairway. There is also another advantage here because the stockroom is at one side of the used car showroom so that bringing the customer for parts in contact with the used cars may result in sales.

Some Shops for Specialized Service

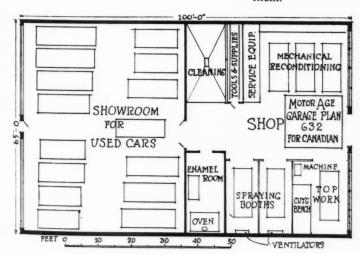
M ANY men do not like the selling game and prefer giving service only. These men are after past masters of things mechanical and have a long list of customers who swear by their ability and would follow them anywhere for their repairs. These men all have pet hobbies and often must have a specially designed building.



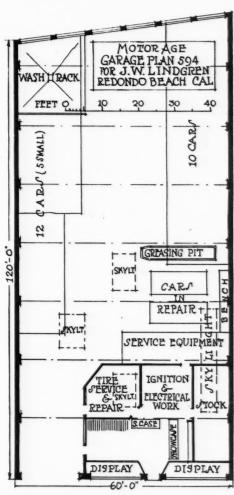


A BOVE is the shop of a man who specializes on "Adjustments and repairs made while you wait." For this he likes an open court where a woman may drive in and sit and read in her car while the work is being done. The inside shop takes care of jobs of a more serious nature.

At the left is a small repair shop with room for handling six cars. This man thought he could service six cars with a small office and accessory store in a building 25 ft. by 45 ft. Our little dotted plan shows the impossibility of this and suggests a space 35 ft. by 50 ft. as the smallest practical size for a 6-car shop. Even here the accessories could not be cared for and an extension is suggested for them.

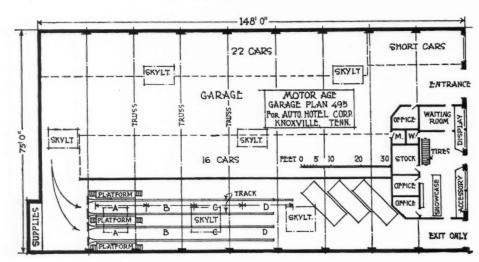


This man has a good idea. He plans to be a special business in renewing and selling used cars. He has small departments but plans to do everything necessary to put a used car in first class condition.



THE above is a shop for servicing a number of cars and trucks belonging to a public utility company. The force is not to be large and space is required only for two cars in repair, most of the building being used for night storage. Accessories and tires are to be sold.

Car Washing Can Be Made Profitable

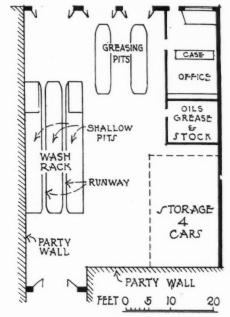


Washing always goes well with a storage garage because owners naturally turn to the storage garage for this service.

HE plant shown above has two complete racks capable together of handling 200 to 250 cars with a complete force working 8 hours. In A position the the top is washed, at B the lower lody and running gears are cleaned, at C the car is wiped with the chamois after which it may be touched up with polish at D. Complete polishing is done further on at one side. The inside is blown out and vacuum cleaned before it enters the track.

The so-called air mist process instead of plain water is usually used in these racks where air under pressure is injected into the water and leaves the nozzles in a fine misty spray which has a peculiar value in loosening the dirt without injury to the finish. High pressure steam is used effectively in some plants on the greasy dirt around the wheels, axles and spring shackles.

THE wash racks here shown are all of the progressive type where the car is pushed along a track as the washing proceeds. Sometimes these tracks have a slight pitch downward to make the moving easier.



THE plant to the right is a very small one but one which could be very effective except that it has no storage space worth mentioning. To do a large volume of washing business, space must be provided where cars can be stored before and after washing; otherwise customers will have to wait for cars and the very condition one wants to exist will be the one to drive business away. Not many customers would want to wait around for an hour or even a half hour for their turn. Most people would prefer to leave the car and come back later for it. POLISHING PIT STEAM BOILER FENCE HOT WATER PIT OPEN AIR GARAGE PIT

This plant is an open air proposition except for the wash rack itself which is installed in a long narrow tunnel like shed and the equipment which is in a

132'-0"

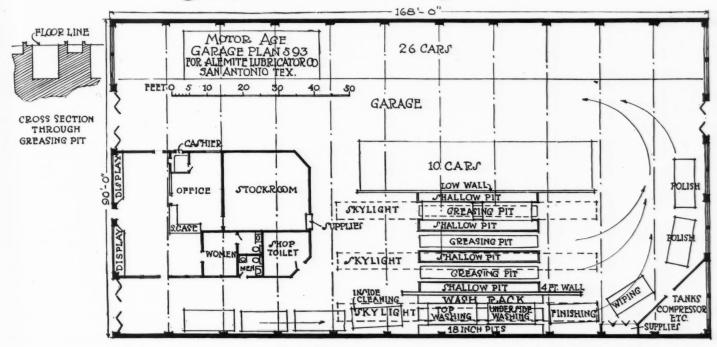
THE washrack at the left is planned to be operated in connection with a filling station and accessory store and also has a battery of greasing pits.

The equipment is indicated here more in detail than in the others. Compressor and air tank, soap mixer, hot water tank, steam boiler, steam from which may also heat the water and laundry tubs for washing chamois and cloths are shown.

In this plant when the washing is finished the car may pass out into the alley and away, come back into the yard and await the owner or wait in the side room for polishing.

A filling station should be a good source of washing business as most of the cars in any vicinity pass through the station sooner or later.

Greasing and Other Special Service



The greasing pits used in this plan are shown in cross section at the upper left hand corner beside the plan. The deep pits are for underside work and the shallow ones are for work beside the car on spring shackles, etc.

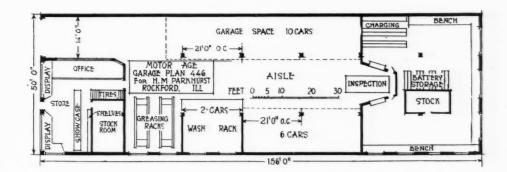
THE large Alemite plant above is planned to take care of cars by the hundred. The cars come in at the entrance, pass across the pits on tracks at floor level and long enough to hold two cars. After being finished they go off as indicated by the arrows and exit past the cashier's office. In case the car behind is finished first it may back off and exit through the passage just back of the stockroom.

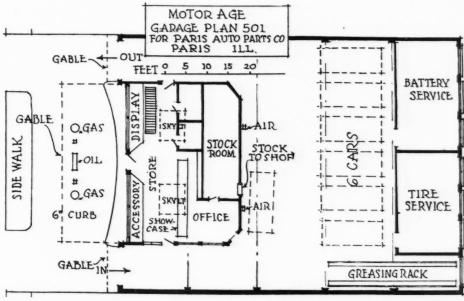
A progressive washrack similar to those described on another page is installed next to the wall. There is space here for three or four cars waiting just inside the door.

PLAN No. 446 is another special service building, the rear part of which is devoted to battery service in all its branches. A car can drive up to the testing apparatus, be given service or be backed into one of the parking spaces to wait.

Unluckily this building being on an inside lot the car cannot drive directly out but must back to one side in order to turn and leave at the front. Greasing racks or pits are located near the front of the garage and an ordinary wash rack for two cars.

PLAN No. 501 is on another inside lot but a much wider one with space for a filling station in front, a large accessory store, office and stockroom centrally located with a drive-in through and out circling the group. The tire and battery service shops are in the rear and there is ample space to service several cars without blocking the drive through. A greasing rack also is installed, one of the elevated type with an inclined approach which can be used here very nicely.





Like most buildings on inside lots the interior will be dark as a pocket; plenty of skylights must be provided to overcome this defect.

E

The Gasoline Station Is a Great



Filling stations are sometimes very elaborate affairs but more often they are quite plain. This suggestion for one with accessory store and tire and battery service while not elaborate could be made very attractive. The yard in the back for tire and battery work is valuable because it keeps customers for this service away from the pumps.

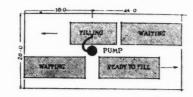
TIRE REPAIR

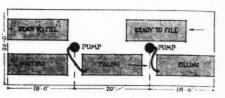
FEET Q. \$\phi\$ 20 30 40

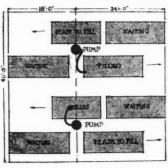
FUMP

BATTERY DEPT.

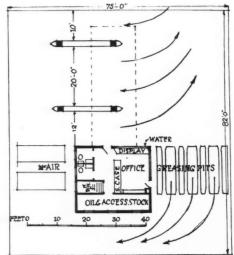
A BROAD, until very re cently, gasoline or petrol could only be bought in tin cans the way we buy lubricating oil and it costs about as much. Gradually the pump is being introduced.





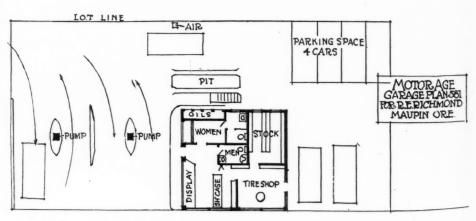


MAIN HIGHWAY



THE tendency in filling stations is to waste equipment by placing too much in too small an area. Sometimes one will find two and three pumps grouped so close together that only one can be used at a time. This is a rather foolish waste for even if all three pumps carried different grades of gas a customer would be apt to drive on to the next station rather than wait for the pump to be vacated while if there were two filling spaces vacant he would stop and wait for the single operator to finish with the customer ahead of him. The diagram above gives the spacing of pumps to accommodate the maximum number of cars. The popularity of a filling station outside the personal element and quality of gas sold can be said to be about in direct ratio to its roominess.

NEITHER of these filling stations needs any special explanation. The one above while drawn to a smaller scale is really 1000 sq. ft. larger than the one at the right. The upper one by reason of its 25 ft. greater width accommodates four pumps instead of two as in the lower. The building on No. 581 contains a tire service shop and space behind the building for service. Note that the air service is off from the driveway in all cases.



CORNER

Exclusively American Invention

TIBERAL space is recommended for all filling Neglect of stations. this general principle makes the station unpopular and is disastrous to business. The things to remember are liberal space for pumps and cars, easy turns in the drives, no cross overs to make congestion and location of air and water service off the drives and out of the way of cars seeking gas or other service. An observance of these rules will assure success if the location is good and there is not too much competition for the possible business.

e

too

ree

ent

her ces

the

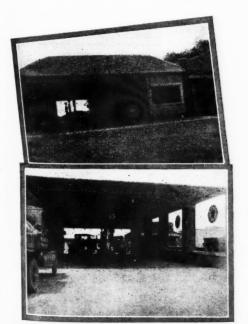
ion

out

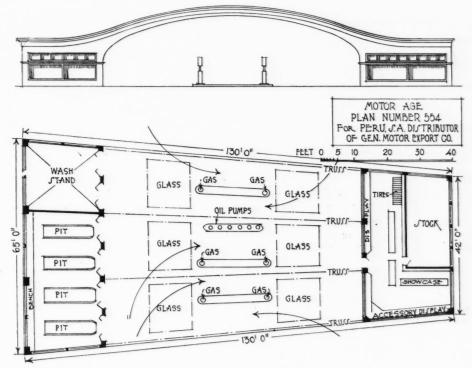
GE

THIS arrangement, No. 554 to the right might at first seem to be confused, but in reality it is not. A better arrangement would of course be to have the cars drive through from one street to the other but that would not be popular, because one street is a main thoroughfare and the other is a back street which ends a little farther along. A person driving on the main road would not like to be shunted off to the back street with no good road to take him back. There are 5 drives with space for three cars to stop on each drive, one at each pump and one waiting.

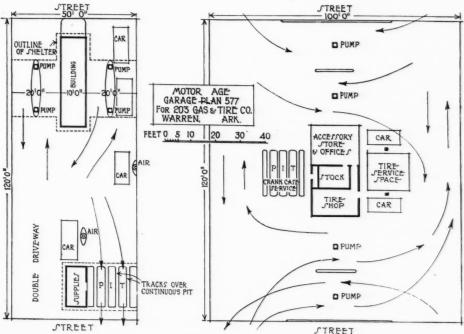
It would hardly happen, however, that there would be 15 cars stopping at once and a car coming in from either direction would drive through till he found an open drive or a drive with only one car waiting.



February 4, 1926



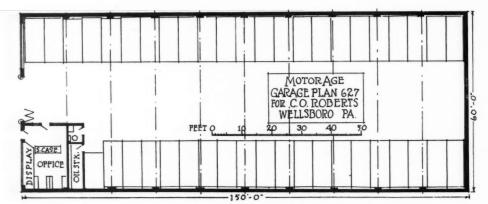
The large arched canopy or arcade would give the station prominence, or in other words advertising enough to pay for itself many times over for it would not be extremely expensive.



AT THE left are some snap shots sent in by the 203 Gas & Tire company of their new filling and tire service station. They asked us for layouts on one 50 ft. by 120 ft. lot and on two lot sof the same size, see above. Evidently they did not use our suggestions but changed their ideas considerably after asking our advice.

Their plan, judging from the pictures, is very good except that we are afraid their long driveway will become clogged with a rush of business as all the service must be given in this space which should be kept open for the pumps. The scheme would have been better if the through drive way were narrower and space provided at one side for service. The enclosed part of the building could be made wider and divided in two parts with an open space half way between for tire and greasing service. We may be wrong, however, and we hope we are for this is a very good looking place.

Some Storage Garage Equipment with

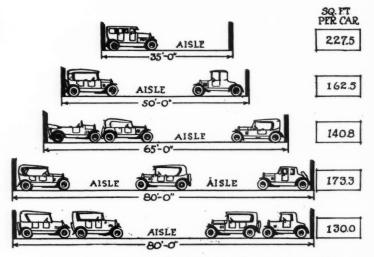


ABOVE is a good example of the simplest form of storage garage. It should be 55 ft. wide to accommodate all makes of cars and may be as deep as the lot will permit. A drive through is not necessary as all cars coming in are parked before going out and so seldom are obliged to turn for the special purpose of leaving.

Only a small space is required for office which may be enlarged slightly if accessories are sold. The night man usually has a small room above the office as this is handy to the entrance.

THE plan shown below is a large storage garage, as such buildings go, capable of storing 200 cars on its two floors. It was to be built on a corner where the side street sloped up enough to permit cars to drive in at the rear at point A and B at second floor level thus avoiding the use of elevators or ramps. This plan will give a good idea of the space required to hold 200 cars with all cars accessible. Some garage men prefer to store the cars 2-deep throwing both aisles together into one and making handling of cars easier, but we question the wisdom of this arrangement as every time a rear car is wanted the forward car must be moved out and back requiring extra labor.

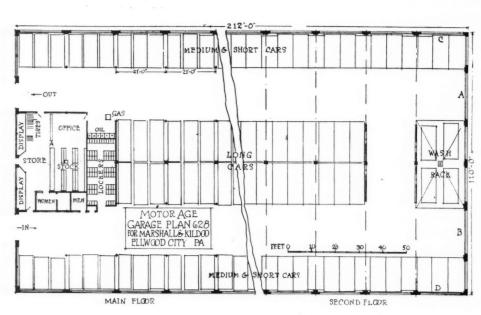
THE storage of cars and trucks in the United States last year making due allowances for those stored in the open air required well over three billion square feet of floor space or 75,000 This tremendous area is divided between public and private garages and varies from the crudest shed with no floor to the modern, fire proof, steam heated, well ventilated and sprinkler protected city garage of many floors.



THE above diagram is for the purpose of showing the different methods of storing cars in different widths of storage space. It will be noted that the more cars are doubled up along the aisle the less will be the area required per car, and it would appear that if cars were stored several deep along a central aisle that the profits would be considerably more.

This would be true if it were not that the labor required to constantly juggle the cars would eat up the profits. Besides this is the fact that a customer does not like to wait for his car to be dug out from the bottom of the pile, and besides this is the increasing tendency to damage fenders, tail-lamps and running boards which latter items make the garage unpopular and necessitate lower charges to get business.

The dimensions given in the diagram are the minimum which can be recommended; the 50 ft., 65 ft. and lower 80 ft. widths should be increased by 5 to 10 ft. for the easy handling of larger cars. Nowadays so many cars carry bumpers, double spare tires and trunks that their length is increased far beyond what it formerly was and a garage that used to handle all cars easily now has trouble.



The first floor of this building is provided with small columns to support the second floor. They are spaced 21 ft. apart to provide space for three cars. The second floor is post free, the roof being trussed.

Governing Principles and Propositions

This elevation shows how a garage may be arranged when facing on a down hill street. The plan shows a good arrangement of skylights to give fairly even lighting; this is better than placing all skylights in the middle, over the aisle.

h

5

3

0

urent ent

led

ev-

hat

bly

not

itly

the

hat

for

s is

age

ing

tate

dia-

be and

easy

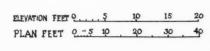
lays

uble

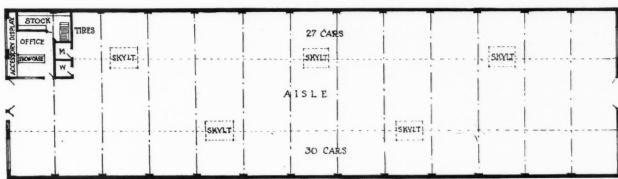
heir

what

that has





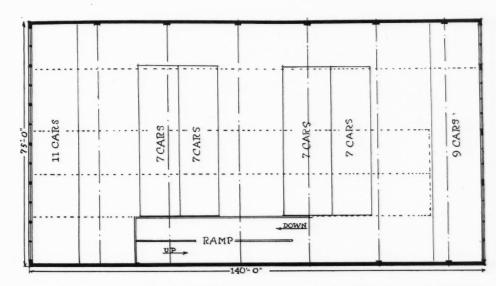


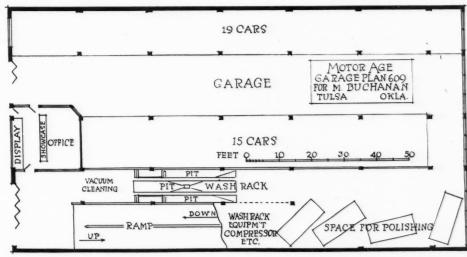
THE garage shown above is similar in all respects to the one at the top of the opposite page except that it is considerably deeper. These storage buildings are almost invariably built with trussed roofs so that columns will not interfere with car movements or cut down storage space.

THE building shown at the right is a two-story affair with a ramp to enable cars to reach the second floor. The ramp is a necessary feature of the storage garage as the elevator is not only too slow but too expensive for this work. It makes considerable difference in the long run whether the garageman is furnishing power to hoist cars to the second floor, third or fourth floor or the car owner is doing it. The car owner has the gas in his tank and will never know the difference, but the garage owner will find a large item in favor of the local power company if he uses elevators.

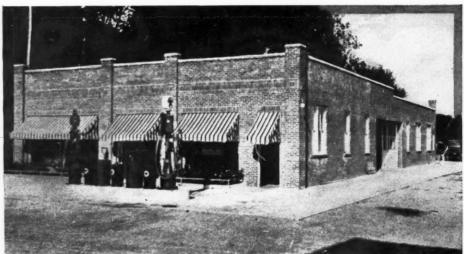
This building is not very well proportioned for storage, the width being such that after the ramp is taken from the width the remaining 60 ft. is wider than necessary for two rows of cars and not wide enough for three. We would suggest that on the second floor the dotted arrangement be followed, storing all the small cars two deep with medium long cars opposite. The extremely long cars could then be stored one row on each side in the remaining space.

On the main floor a 50 ft garage has been set apart and the 10 ft. strip between it and the ramp which remains has been utilized for a progressive wash rack. This space opens out to 25 ft. when the ramp is passed.





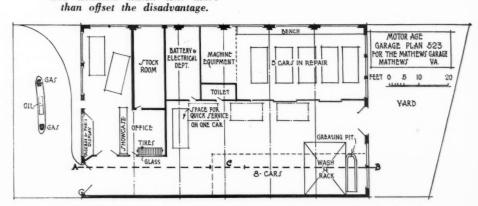
What Motor Age Has Been Doing to Help



THE Mathews Garage, Mathews, Va., has cut down the cost by making the building narrower. With an inside lot it would be necessary to have a passage through the building so this dealer left the passage outside making an entrance on the side from the private alley thus formed. On our plan the change would bring the outside wall over to the line A-B with the entrance at C. Then by eliminating the shop partition and standing his cars in repair across the back wall where with the door closed he could accommodate 5 cars he was about as well off as before. To make up for the loss of storage space he elevated battery, electrical and parts department to balcony and stores cars under it.

This is a very nice looking building having a very businesslike appearance. The awnings while hiding the display to a certain extent give an air of prosperity and neatness which will more PLANNING the automotive building whether for service, sales or manufacture requires knowledge of both the automotive lines and of building. One might design a wonderful building which the architect couldn't build without making changes which would ruin the scheme.

On the other hand if the architect is turned loose he will undoubtedly design a good building if he is a good architect but many times the designs are not well adapted to their use.



While this company has cut down the cost slightly by reducing the size they have not such a good working plan and will find the passage rather awkward when someone builds next to them.



We haven't much information about this garage; the man who built it has since died and we are indebted to his widow for the photo. We are quite sure, however, that no architect was employed and that Mr. Ruskaner built from our plans with such changes as he thought advisable.

The building is not what one might call beautiful but no doubt fills a need and looks fairly well as country roadside garages go. It is at least neat and well kept.



The Mosier Garage at Mosier, Oregon, was built last spring partly from our plan and we are glad to say it is a pretty good looking place. They give service on all makes of cars but do not have an agency; sell gas, oil and accessories and are generally useful to the community.

agency; sell gas, oil and accessories and are generally useful to the community.

The steel sash gives the building an up to date appearance and the plate glass is fine as far as it goes. We would like to see a little more of it used, however, and the accessories displayed a

Dealer Readers Solve Their Problems

OTOR AGE aims to be a sort of pilot in its readers' building voyages trying to point out the best course in arranging the departments and equipment and the best method of building around them. We are not architects and so cannot produce finished working plans, but our layout plans can be built after being developed in And we are quite details. certain that we have never sent out anything that couldn't be built.

t

h

f

d

y if

IS

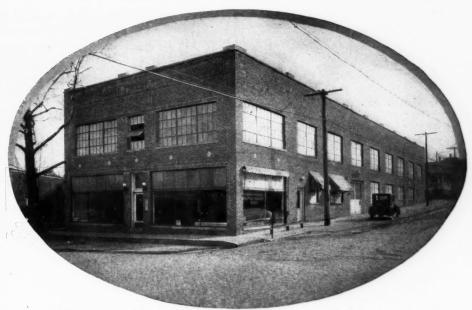
0

glad give e an gendate r as e of

ed a

1 GE

We do not expect to have our designs followed always and are sometimes surprised when they are; we are disappointed, however, when our client discards an idea we have worked hard to get, in order to adopt some pet of his own which we can see at once is neither practical nor convenient.

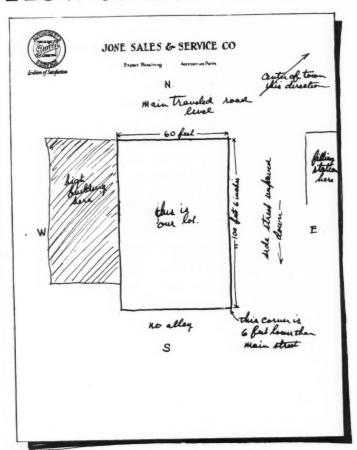


THIS new building of the Harrisburg Motor Sales Corporation, Harrisburg, Illinois, was not built according to our plans, we are glad to say. We made them a plan but the lot was such that a first class plan could not be fitted to it. We are of the opinion that our plan pointed out this fact and led this dealer to a more advantageous location. This structure is built on a corner where the side street goes up hill enough to require only a short ramp to reach the second floor.

The second floor is well supplied with windows of the approved steel sash variety having sections that tilt to insure ventilation.



How to Get the Most From This Service



The above is the kind of diagram that we like to get.

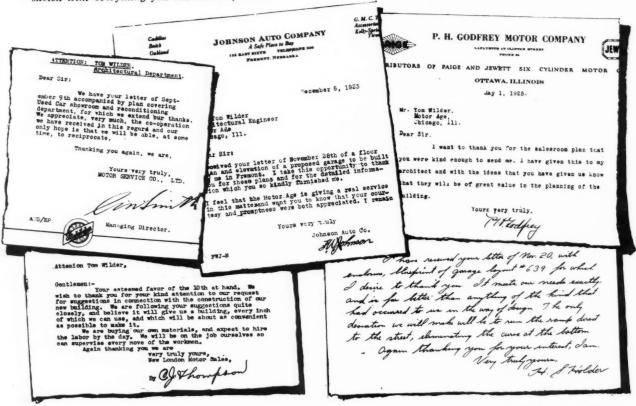
Just take a blank letter head and make a rough sketch with everything you can think of on it.

WHEN asking help of MOTOR AGE remember that the tailor couldn't make you a suit of clothes to fit without complete measurements—chest, arms, legs, everything. So it is with us, we should have a diagram of your lot showing irregularities if there are any, and a complete description of your business telling the various lines in which you are active.

A LWAYS give us more information than we need rather than not enough. Besides drawing a rough diagram such as that shown at the left write us a letter on your own letterhead stating as simply as possible how you intend to use your space, where you think the departments should be, where the car entrance should be, etc.

Most dealers have some sort of an idea of how things ought to be and if we know this we will be much more apt to suit you. On the other hand if your ideas are wrong we will not hesitate to tell you. We want you to be honest with us too because this service costs us considerable and it is hardly fair to ask it unless you intend to use it in some way, other than to satisfy your curiosity.

If you want information on the adaptability of a certain lot, say so; don't ask us for plans for the lot. We can generally give you the information and rough sketch in a letter developing the plan later if you decide to buy. Remember you would have to pay an expert a lot for this information if you could buy it at all, so don't abuse the service. Also don't expect a reply too quickly as there are always a number lined up ahead of you especially at this time of year.



Here are a few testimonials telling what some of our clients think about our service. No doubt there are others that do not think so well of it, but we are always glad to get expressions of approval and hope that the service will be received in the spirit in which it is given.

Salesmen Swing Into Action at Chicago Show

(Continued from page 16)

distributed to those who inquire for it. With this opportunity salesmen endeavor to get the name and address of the prospect which is immediately given to a woman assistant at a small desk located to the rear of the booth. At the earliest opportunity the woman makes out envelopes on a typewriter. The same evening additional literature is mailed to the prospect inviting him to allow a demonstrator to call with a new car at his house and at his convenience.

E re-

nake

lete

ery-

ve a

ities

tion

es in

need rough

letter ssible

k the

should

things

more

it you

sts us

s you

a cer-. We sketch

o buy.

ot for

abuse

kly as

espe-

Where prospects are in doubt as to how a car acts on the road, several demonstration models are kept in readiness adjacent to the entrance to the show. The usual time allotted to a demonstration drive is from 30 min. to an hour.

In the sales talks to the prospects, the line followed is chiefly along mechanical details, stressing such items as seven-bearing crankshaft, four wheel brakes and the power on the engines

Appeals for Each Price Class

RANKLIN—Salesmen in the Franklin booth feel they can approach almost any car owner in the low, medium or high price car fields as a prospective customer for one of their cars. Should their prospect be in the high price field they believe they can make a direct appeal through stressing the distinctive and custom effect lines of the new series Franklin. Where they are against a medium price car owner, the talk in general brings out such features as smoothness of operation, reliability and performance. In the low price field, the economy aspect is brought to the fore and the air cooling feature is more heavily played.

Since the new series have made their debut no stripped chassis have been shown, it being believed that the mechanical qualities are taken for granted as being almost perfect and therefore in this price field a stripped chassis is not necessary.

Careful consideration was shown in the placing of the cars in this exhibit. While the four-door closed cars are the most popular, attention is drawn to the booth by the placing of a roadster on one side and a coupe on the other, between which are located a touring car with the top folded. Both the smaller cars have a high color and form the center of attraction, the coupe being finished in cream and black molding.

Literature is not to be seen around the booth and as a rule is not given out unless the inquirer appears to be a prospective customer. Fourteen salesmen are on duty at the exhibit of five cars so that as much time as desired can be given to each prospect.

In general the main topic of the salesman is that of offering the best merchandise possible with the features of the engine and riding qualities also stressed. Cars were also exhibited in one of the local hotels.

Distinction and Striking Lines

OON-DIANA—Price appeal is not the uppermost thought in dealing with prospects entering the Moon and Diana booth. With cars not in an highly competitive field, the sales talk is chiefly along the distinguished and striking lines of the cars. In following out this idea, the talks are often addressed to the woman should a couple be interested in the exhibit. It is felt that women decide about 90 per cent of the sales in this case and therefore they are given the most consideration.

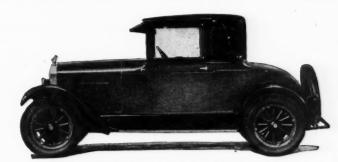
While the cars themselves have a colorful and somewhat



Velie offers a prize for a suitable name for this new model

unusual appearance, additional tone is given the exhibit by employing ribbons of contrasting color which are passed diagonally over the hood of the cars. Apart from the added attractivness of this style, the method prevents the public from lifting the hoods to inspect the engines with perhaps the consequent damaging to the finish. While it is admitted that stripped chassis draw additional people to the booth, it is felt that this type of person who stops to look at the mechanism is not as a rule interested in the car. With this in mind, Moon-Diana did not exhibit a chassis of this type.

Literature was given out when requested and attempts are



The new Pontiac, a General Motors product

made to obtain the name and address of the prospect at the same time. Seven salesmen are on duty the whole time and it is said that the two and four door sedans are the best sellers. Mechanical details are not discussed if possible when talking to the prospect with the idea that the prospect should be given the impression that the mechanical features of the car are perfect and that there is no need to worry about them.

No "Cut and Dried" Attacks

REO—In the absence of a stripped chassis, attention is directed to the booth by a colorful roadster model at the prominent corner. It is believed that the public is "motor wise" nowadays and the people that stand around the stripped chassis exhibits are more interested in what they can learn than in the purchasing of the cars themselves.

The eight to 10 salesmen who are on duty allow the prospect to open the conversation as a rule and they do not employ any "cut and dried" method of sales attack. Where desired a prospect can be given a ride in the car by having a salesman discuss the car while a phone call to the salesroom brings a demonstration car to the show in the mean time.

Literature is practically hidden from sight on the opening day and evening as it is believed that quite a large percentage of the attendance that day is more on a sight-seeling tour and interested in the enlargement of their catalog collection.

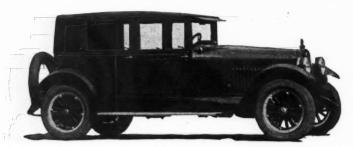
Five cars were shown, one roadster, one coupe and the remainder sedans, the latter of course being the most popular sellers.

Merchandising On Comparisons

Paige AND JEWETT—In general, sales talk in the Paige and Jewett booth is centered along lines of comparative value. The prospect is invited to raise these points for discussion so that comparisons with cars selling for several hundred more dollars can be made.

While literature will be given to inquirers on request, it is preferred to mail it and the prospect is asked to allow this to be done. This of course enables the prospect to be followed up by a salesman later.

Two working, electrically lighted stripped chassis finished in contrasting tones of enamel are set across the front of the exhibit and mounted on short pedestals so they correspond to the normal position they would take on the road. This method enables the public to judge more closely the relative height of the frames and it is believed the working mechanism can be seen better on account of looking down. Except around the power plants where red silk ropes held in silvered arms,



The Brougham is one of Hudson's best selling models

the latter attached to the car frames are placed, the chassis are unobstructed enabling a very close inspection to be made where desired.

Normally 17 to 19 salesmen are on duty in the single booth with certain of the men assigned to handle either Paige or Jewett exhibit. Attempts are made to discourage taking prospects out of the show for demonstration rides, but where it is desirable to do so arrangements are made so that a demonstration car can be called on the phone from the local dealer showrooms.

40 Days of Show Coaching

UDSON AND ESSEX—Complete cars of the closed variety make up the separate Hudson and Essex booths. This is the first year that stripped chassis have not been shown and it is the belief of the local sales branch manager that exhibits of this type do not increase the prospect list to any extent. In addition to taking up a large amount of room which prevents the public from moving freely about the cars, it is felt discussions around the chassis exhibit develop needless argumens.

Eight salesmen by day and 10 in the evenings are employed in each booth. Literature is given out upon request which enables the salesmen very often to get the name and address of the prospect. For 40 days prior to the show, 25 salesmen as well as the department heads of the factory branch have been drilled in the proper selling talk on the cars by the branch manager.

National advertising and the name of the company behind the cars are relied on to a large extent to draw crowds to the exhibits, as the tone of black predominates and there are no silvered stripped chassis to catch the eye. All the salesmen, however, are furnished with attractive badges in blue and gold with the name of the car contrasting. On the desks at the rear center of the booths, the name of the person in charge at the time is mounted on a special stand. Several attendants in neat uniforms are to be seen around the exhibits for the purpose of having the booth constantly tidy.

Lower Prices and High Value

DOGE BROTHERS—No literature is available at the Dodge Brothers exhibit. When inquiries are made, the name and address of the prospect are taken with the understanding that complete information of this character will be mailed to his home immediately. This system accomplishes several things. It prevents waste of literature, it enables the local dealers to build up a really active prospect list which justifies the salesmen making frequent calls on the enquirer.

Approach to the public is along general lines as it is felt that in several cases the prospect is more familar with the justifies the salesmen making frequent calls on the inquirer. is found to be no barrier when a prospect raises the question as the talk is directed to the horsepower developed. The practice of having demonstration cars outside the show was discontinued several years ago—it is now left to the local dealer in whose territory the prospect lives to complete the demonstration.

Eighteen salesmen are in constant attendance and the stripped working chassis is in charge of a technical lecturer from the main factory. The chassis located in the front of the booth acts as a magnet which later enables the salesmen to lead the prospect to the three sedans and a coupe in the remainder of the booth.

Chief sales talks are along the lines of the new low prices

and the value that is to be had. An additional feature of the booth is the presence of a colored attendant who is clothed in an immaculate white uniform.

Dependability and Long Service

TEARNS—As the field of the Stearns-Knight is more or less a special one, no particular methods are adopted to draw an unusual crowd to the booth. For the three salesmen there are four cars on the floor. The main sales approach is largely along the lines employed by the other manufacturers of high price cars, namely, that of buying reliable transportation for a number of years.

The four cars which comprise the exhibit include a roadster, touring and two sedans. In line with present trends, the closed cars are proving the most popular. All cars are adorned with an unusual array of accessories while the characteristic Stearns method of striping is used to advantage.

There is an adequate supply of literature which is available for all those who desire to obtain information.

Lecturer Does Good Work

LEVELAND—In the case of the Cleveland exhibits, there is little doubt that the silvered stripped chassis acts as a magnet which draws throngs to the booth. At the conclusion of his comparatively short talks, the technical lecturer will turn around and point to the complete cars forming the rest of the exhibit and state the price of each model in turn. This system seems to draw the listeners to the complete cars where otherwise they might have passed on.

As prices f.o.b. factory were displayed in a conspicuous position by means of painted cards on the windshield of each car, there is little left for the salesmen to do but to complete the deal after the used car question has been settled. Where the question arises as to the value of a used car, the salesman offers a liberal allowance on the prospect's present machine and urges that he make a deposit at the show on the new car in which he is interested. It is pointed out, however, that the tentative valuation on the old cars is to be subject to approval when the car is taken in for exchange.

All four exhibits are closed cars comprising four-door sedans and a coupe. Salesmen are equipped with silk badges displaying their names.

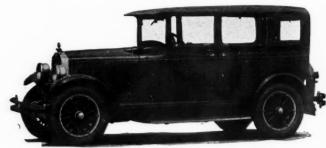
Accommodating With "Dems"

INCOLN—Sales talk in the Lincoln booth is mainly on the subject of long years of transportation. Prospects are informed that they can expect good service out of their cars after they have been driven constantly for six years.

While the closed cars of course are the most popular, there is a heavy demand for open cars of the sport type. An engine working at a very slow speed and sectioned throughout is placed at the main corner of the booth while a sport touring model dominates in the front center.

For the purpose of demonstration, prospects are taken out for rides in cars belonging to the salesmen at the booth who are requested to drive the Lincoln cars to the show. There are five salesmen on duty and an interesting method is adopted by them where prospects do not ask for a demonstration. At the conclusion of the talks the salesman asks where the prospect is stopping and if it is learned that he is about to return to his house or hotel or has a special place to go, it is requested that the salesman be allowed to drive him there.

In the rear deck of a coupe the literature is kept and this is only given out to logical prospects upon requests.



The new Jordan sedan with all-steel body

LDSMOBILE—As in the case of several other General Motors exhibits, the cutaway working chassis is the attracting magnet. In the Oldsmobile booth the lecturer is able to lay stress on some particular point by passing to the spectators gathered around the chassis several parts of the car in question. These parts are located on a tray between the side channels of the frame towards the rear of the chassis and form a ready means for reference.

of

ned

or

ted

ree

les

her

ing

ter.

the

stic

able

here

acts

the

lec-

ning

el in

com-

d of

it to

ttled.

esent

n the

ever,

bject

edans

dis-

n the

s are

their

there

ngine

out is

uring

n out

n who

There lopted

n. At re the out to

o, it is

nd this

AGE

ere.

Literature in this booth is to be taken when desired as indicated by the fact that there are quantities of pamphlets on the running boards of the car as well as on the chassis.

Where prospects desire to ride in demonstration cars, machines are kept for this purpose in a ublic garage close to the entrance of the show. This scheme enables the cars to be protected and insures the car always being clean and tidy.

An additional attraction was a sport roadster model at the corner while the remainder of the cars, two sedans and a coupe, had the prices displayed in a conspicuous position on the windshields.

Twenty-one salesmen decorated with silk badges were in constant attendance and the general line of approach was determined after it was ascertained the make of car the prospect was driving.

"Super-Sport" Aids Selling

RICKENBACKER—The Rickenbacker Super-Sport Sedan, which has been a powerful magnet in focusing attention on the Rickenbacker displays in the shows in the country thus far, again performed spectacularly at Chicago. With a cutaway chassis it occupied the front of the Rickenbacker booth and as crowds gathered a dozen or more alert salesmen after a few words of explanation drew prospects through the rear of the booth where the standard Rickenbacker products were displayed. It was pointed out that the Super-Sport Sedan which had attracted attention was a special body job on the standard Rickenbacker chassis and here opened the opportunity to impress the prospect with the excellence of the product. Ten salesmen were busy throughout the show period making contacts with show spectators attracted by the special job and shifting their interests to the regular line.

The regular products were represented by a sedan, a coach and a sport body model.

Captain Eddie Rickenbacker, following his custom at previous shows, was present in the booth, studying the reaction of the show crowds and occasionally assisting personally in the presentation of his line.

ARMON—The Marmon exhibit showed a two passenger roadster, seven passenger special sedan, five passenger special sedan, seven passenger DeLuxe limousine, four passenger Victoria coupe and a stripped chassis. This was the first showing of the special brougham which has been described in an earlier issue of this paper but which was not ready for presentation at the New York show. Its principal characteristics are its refinements in body trimmings, upholstery and hardware. Six salesmen chosen because of their thorough

familiarity with the line and ability in presenting the car are at the booth to meet he public.

Prizes Stimulate Effort

ELIE—In addition to the special sedan, which the public through a contest has been asked to name, Velie is putting special merchandising effort into its Chicago Show display with a sales force that has been especially primed for the occasion and is stimulated by an interesting contest. There are prizes for the first sale made each day, for the largest number of bona fide sales closed during show week, and last and most interesting of all for the salesman, most efficiently reporting prospects. When a reasonable period after the show has elapsed a thorough check will be made of the reports of each salesman and the results of the follow-up. The winner naturally will be the fellow who gets names and addresses correctly, who is most accurate in the recording of the data for follow-up work and whose reports result in the largest number of actual sales.

Velie is showing a custom sedan, coupe, brougham and Royal sedan.

PEERLESS—Peerless displayed at the Chicago Show the following models: Five-passenger coupe on the 126-inch wheelbase chassis, a sport roadster and a sedan on the 133-inch wheelbase, five passenger sedan and a standard sedan on the 116-inch wheelbase, a five-passenger sedan of the "8-69" Series on the 133½-inch chassis and a stripped chassis. In this exhibit there was particularly close and interesting contact between the show and the salesroom where a complete display of all models was maintained throughout the week with a separate force of salesmen to demonstrate them. At the salesroom also there were shown some of the newer body models on the "6-80" type chassis which are being presented this year under the Peerless policy announced a few weeks ago of presenting a new body model each month.

Chart Answers Questions

TAR—Following two weeks of intensive study and training, in which the salesmen of the Chicago-Durant Co., Chicago distributor of Durant and Star, were schooled in the merchandising points of the car and the presentation of them, the salesmen went into the Chicago show well prepared for the opportunities presented by the large, interested, first-day attendance.

Each salesman had been equipped with a "talk chart" containing complete information for answering every conceivable question concerning the cars.

A dozen salesmen were on duty under the personal supervision of Mr. Anstead, retail sales manager, in two exhibits, one in the main Coliseum and the other in the North Hall.

The Coliseum exhibit contained a coupe and Landau sedan on the six cylinder chassis and a sedan and coupster on the four cylinder chassis and a cutaway chassis. The North Hall exhibit howed a phaeton and a coach on each chassis.

The salesmen, identified by large badges containing their names, were prompt to suggest immediate demonstrations when prospects evidenced interest in any of the models.

New Bauer Cab Feature of Taxicab Section

THE latest attempt of the Bauer Cab Co. to solve the problems of providing maximum riding comfort, seating capacity, luggage space, safety and low operating cost, formed perhaps the most interesting exhibit of the taxicab section of the Coliseum. This cab now has three trimmed drop seats in place of the former two, and the interior is more comfortably arranged. In addition the driver's compartment is entirely enclosed, and a somewhat larger space has been preserved for baggage. Access to the interior is made easier by the cutting away of the roof at the side of the driving seat.

No price has as yet been fixed for this model although it is expected to sell at around \$2,450 in Chicago, and, it is anticipated, it will not be in production before June of 1926.

An attractive proposition from the owner-driver's standpoint, was the new Hudson super-6 cab, which was primarily sold to Checker cab drivers. The body on this is the standard Berline limousine, trimmed with Chase Velmo cloth, and is therefore a very luxurious vehicle for hire trade. Naturally

there is very little provision for baggage accommodation. This cab, painted to order and complete with cowl light, illuminated sign, dome light and curtains, but no spare tire, sells for \$1875.

Dodge Bros. staged a smart looking cab with a Shamrock four-door Berline body by the Millspaugh & Irish Corp. This body is designed to seat three on the rear cushion, in addition to two more on the drop seats. The model shown was trimmed in the standard blue Spanish leather. A notable feature was the landau top.

Two standard 4-cyl. Knight-engined Yellow cabs and one Red-top cab on a similar chassis were featured by the Yellow Cab Co. These three were all of the new Milemaster totally-enclosed type. Adjacent to these was the Hertz exhibit of the tourer and sedan which have become so well known through the driverless hire system.

Willys-Knight showed two cabs of standard design, and the Luxor company their de luxe vehicle, while Reo staged both a chassis and a complete cab.

The Show Technically Viewed

Continual Refinement of Chassis and Bodies Has Added Durability, Performance, Safety, Looks and Comfort to Motor Cars

By B. M. IKERT

ET'S give the cars at the show the once-over," says your friend at lunch.

"Fine," you say, "where and when shall we meet?"

"Coliseum, about 2 or a little after," says your friend and goes on, "I have a few odds and ends to clean up at the office and want to chuck my notebook in my pocket."

So a little after 2 you meet at the show. Inside you check your overcoats and "go to work."

Your friend knows more about the new models than yourself and you proceed to ask all the questions and let him do the explaining.

So right off the bat you ask, "Aren't cars pretty much standardized and down about as fine as they will ever get?"

"Well," says he, "after we get out of here I will ask you the same question and let you answer for yourself. Meanwhile I will make notes as we look the cars and chassis over."

You happen to glance at his notebook and you see he already has jotted down at some time or other many things about axles, gears and so on. So you and your conductor go through the show. He points out this and that, makes a note of it and you just look and say, "Oh, I see."

And you do see things. Things you never dreamt of. In the first place there is—but wait a minute. Let's take our conductor's notebook and see what he jotted down. Here's the stuff.

Frames-Heavier stock in most cases. Deeper sections.

Flange width increased. More cross members, especially tubular. Front end of frame stiffened, probably due to larger power plants, front wheel brakes and balloon tires.

Front Axle—Upper flange of I-beam made wider to increase torsional strength. Tie rod equipped with ball and socket joints. Ball bearing thrusts on some axles. Spring take up in tie rod pivot to dampen out wheel wobble.

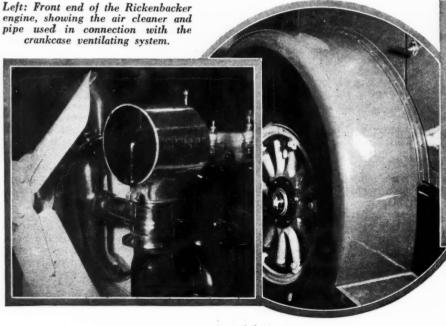
Rear Axle—Inner end of axle shafts made with larger number of splines. Large bearings on pinion shaft. Housings stiffened. Integral bosses or pads for jack. Better provision to keep lubricant in housings. Large bearings where torque arm is used.

Spring—Semi-elliptic almost universal. Larger number and thinner leaves in many. Several cars using rubber or fabric spring mountings in place of metal shackle. Some springs enclosed—keeps water and dirt out and lubricant in. Several front springs shackled at front end—said to prevent shimmying of wheels. Metal shackle bolts easier to lubricate.

Wheels—Look prettier. Used to have fewer spokes in front than rear—now have same in each. Hub flanges heavier and rubbed sometimes. Some makes use cast bronze hub caps. Tire valves accessible with disk wheels. Natural finish wood wheel demands first class material—you can see grain in wood.

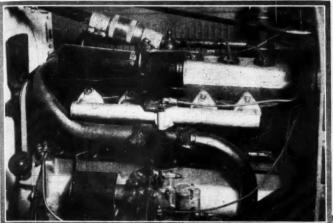
Tires—Balloons almost universal. Old objections eliminated. Probably because chassis now are built for balloons. Redesigned steering gears also make car handling easier with balloons.

Steering Gears-Made more rigid, especially around





Center: A typical fender used in connection with balloon tires is also shown. Such fenders are much wider than formerly used. Right: There are numerous instances of duplication of purpose. Here for example is a special body on which the cowl mould, side light and tire carrier bracket are integral.



Below (right) is shown a cut-away view of the Pontiac engine. Note the control valve at the far end of the manifold to distribute heat from the exhaust around the vertical pipe of the intake manifold. The other illustration is that of the Cleveland front of engine mounting, a steel plate bolted to both frame side rails.

Above is shown the engine in the new Willys-Knight 70. It shows particularly well the intake manifold of rather severe design and quite different from the manifolds of olden days when graceful sweeps and bends were the thing. Note also the hot spot arrangement for heating the mixture.

s. nid

er

er

gs

er

er

ne

nt

to er

in

es

st

ls.

m-

al-

ng

nd

ction

iders

ight: ation

ecial

GE

parts reduce spinning and make gear shifting easier. Clutch fabrics accurately made to insure longer life.

Transmissions—Short and compact units. Gears in some ground or lapped to make operation quieter. On higher priced cars teeth are of fine pitch. Shorter and heavier shafts promote quietness. Bearings larger in some.

Lighter gears facilitate shifting. Neater arrangement where hand and brake levers come through floor of car.

Propeller Shafts.—Nearly straight-line drives in most cars. Some absolutely straight, especially where power plant is slightly inclined. Propeller shafts tubular and often flared at certain points to increase strength and prevent whipping. Fabric disk joint about holding its own. Metal type of joint popular on newer makes of cars.

Fuel Tank—Tank securely mounted. Not affected by frame weave. Heavier gage metal used in many. Baffle plates prevent surging of fuel over rough roads. Many tanks now provided with fuel height indicating devices recording amount of fuel on instrument board.

Lighting Systems—Use of double filament lamp coming

to front. Directs light rays downward electrically instead of mechanically. Stop lights, backing up lights and so on quite common as regular equipment. Same true of auxiliary driving lights mounted on front of car or on windshield. Fuse boxes more accessible. Lighting switch for dimmer control placed on steering column or steering wheel.

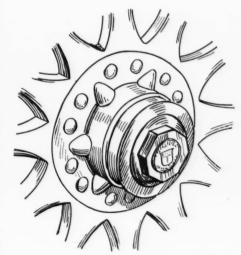
Bodies—All steel body becoming popular. Makes possible narrower windshield and door pillars. Increases vision. Composite bodies quite generally used. Woodwork sometimes painted before metal is put on to keep moisture out of glued joints. Laminated joints on high priced bodies used in place of mortise and tenon joint, some makers equipping cars with fabric bodies. Upholstery of better quality even in medium priced field. Mohair quite general although leather available in some closed models.

trunnion shaft supports. Lowered in many cases because seats are lower due to longer bodies. Several perfectly straight drag links even with balloon tires.

Engines—Power output increased quite generally. Bore and stroke increased in many. Better understanding of heat flow. Intake manifolds designed for handling more adequately present day fuel. Many engines now fourpoint mounted. Crankcase parting line often below center of crankshaft. Larger number of main bearings. Bearing sizes increased in some cases. More camshaft bearings. Oil pumps often placed outside crankcase. Oil cleaners, filters, air cleaners and gasoline filters becoming quite common. Better provisions made to prevent sediment clogging oil screen and interfering with lubricating sys-

tem. Valve push rod guides made in clusters, reduces machine work. Some engines now mounted on insulating material to prevent transmitting noise to car frame and also to provide flexibility. Valves now practically all made of alloy steel in place of cast iron and steel stem. Quite general use of narrow piston rings. Pistons over-run cylinder bores, top and bottom, prevents wearing of shoulders in bores. Combustion chamber design to increase turbulence. Greater use of thermostatic devices for regulating water temperature. Cleaner layouts of high tension cables.

Clutches—Plate clutch very popular. No adjustment necessary on some. Self lubricating pilot bearing frequently used. Easier clutch pedal operation by greater leverage. Facilities for assured lubrication of clutch throw out bearing. Lighter clutch



A close-up of the Cadillac wheel hub, showing the re-inforcing between the hub shell and flange. It is a detail said to add between 25 and 30 per cent more strength.

Bumpers and Shock Absorbers

Census Shows Many Items Missing

Articles That Make for Better Motor Car Operation and Add to Safety And Comfort of Passengers Take Leading Place in Automotive Display That Goes With National Show. Large List of Miscellaneous Items

B UMPERS and shock obsorbers constitute the chief items of display in the accessory exhibit of the Twenty-sixth Annual Chicago Automobile Show.

Eighteen different makes of bumpers are on hand and 12 shock absorbers.

An actual count of the accessories together with an analysis of the contents shown in the various booths reveals some rather interesting things. For example, some of the products which formerly were shown in great abundance at the national shows and which constitute items of the first magnitude in motor car construction were totally lacking. Thus we find no tire manufacturers showing their wares; no radiator manufacturers are in evidence; storage batteries are nowhere to be seen and only one maker of spark plugs occupies a booth in the accessory display.

Those who have followed previous national shows will recall the hundred and one different makes of spark plugs, all sorts of tricky ignition devices, axles, transmissions and the like. It was then largely a battle of cylinders, wet or dry clutchs, semi-floating or full floating axles and things of this sort.

If any definite conclusions are to be made from the analysis of the accessory exhibits at the Chicago Show, it is likely that one fact can be definitely established and that is that during the last few years there has been a constant weeding out of the non-essential in motor car design and construction.

On the other hand there is a steady progress toward the things that make for better motor car operation or add to the safety and comfort of the passengers. For example, engine temperature which has been given much thought on the part of automotive engineers lately, has been further helped by introduction of devices tending to prevent too much cooling of the radiator during the warming up period. Thus we find such things as radiator shutters, thermostats, heat indicating devices and the like forging to the front.

It is, of course, necessary to use judgment in summarizing the figures shown herewith in regard to the nature of the exhibits and the number of exhibits. For example, while nobody is showing any cylinder reconditioning equipment it is not to be taken for granted that there has been a falling off or an entire elimination of such apparatus.

The same holds true of such items as brake lining, brake service equipment, battery service equipment, electric portable tools, valve reconditioning tools, welding outfits and things of a similar nature. While some of these items were not shown,

or shown to a very small extent only, the fact remains that there are a great many manufacturers of such items and who exhibit at shows given up entirely to such equipment. After all the items shown at this year's Chicago exhibit are largely those which are of interest to the car owner and do not appeal quite so much to the operator of a maintenance shop or garage.

It will be noted that in connection with the accompanying table under the column headed, New During Last Year, several manufacturers have made additions to their line. In some cases the manufacturer where so indicated simply has taken on the particular item specified, which might have been made by some other concern previously, or on the other hand he may have evolved such an item in his own establishment.

Naturally the miscellaneous accessories head the list so far as volume is concerned, but the reason for this is that much of the material is difficult to classify. Under this general heading appear such items as radiator emblems, monograms for doors, body polishes, radiator sealing solutions, visors for headlamp, rear view mirrors and a great variety of items.

To make a little clearer some of the headings in the table the following holds true. Enclosures, for example, relate to winter tops, curtains and similar items by which an open model can be converted into what might be roughly termed a closed model or approximating such a model. Fuel feed systems take in the vacuum tanks. Garage equipment refers to such items as floor jacks, cranes, tire changing machines, presses and so on. Hand tools cover a multitude of small shop tools such as wrenches, screwdrivers, and similar pieces of equipment not operated by power.

Heat indicators refer to devices placed either on the radiator cap or on the instrument board of the car to determine the temperature of the cooling water. Lighting devices, special, take in auxiliary lights, or step plates in which lights are incorporated, driving lights and so on. The pressure garage lubricators, specifically are those wherein the grease or oil is forced into spring, to transmission and differential housings under pressure and in large quantities.

Service equipment incorporates such things as piston aligners and things of a similar nature used largely in the actual repair of motor car units, but not always driven by power. Washing outfits are those pieces of apparatus wherein water is applied under pressure or by spray to motor cars. By wrecking equipment is meant such items as towing equipment, hoists and cranes for mounting on a service truck.

Predominate in Chicago Show Accessory Exhibits

By B. M. Ikert

Accessories and Equipment at Chicago Automobile Show

Figures in the first column indicate the number of each kind of product exhibited; figures in the second column indicate products added to lines of manufacturers during the past year.

	New		New
	During		During
Number	Past	Exhibited	Year
Exhibited	Year	Number	Past
Air Compressors 3	0	Oil Filters 4	2
Air Cleaners 3	0	Oils & Greases 3	0
Air Towers 2	0	Paint Spraying Outfits 2	1
Battery Chargers 2	0	Paints & Lacquers 2	0
Bearings & Bushings 3	0	Pistons 1	1
Bearing Recondition Tools 1	0	Piston Rings 3	1
Bins & Shelving 1	1	Radiator Caps 1	0
Bodies 1	1	Radiator Condensers 2	1
Bumpers18	0	Radiator Shutters 3	1
Business Papers 4	0		-
Carburetors 5	0	Replacement Gears 1	0
Chassis Components, Major11	2	Service Equip., Miscel 3	2
Cigar Lighters 2	0	Service Parts (Small) 2	0
Display Devices 1	0	Shock Absorbers12	1
Electrical Service Equip 3	1	Signal Lights 2	1
Enclosures 2	0	Silent Chains 1	0
Engine Cleaners 1	0	Smoking Sets & Vanity Cases 2	2
Foot Accelerators for Fords 1	0	Spark Plugs 1	0
Ford Timers & Ignition Units 2	0	Starting & Lighting Equip 2	0
Fuel Feed Systems 2	0	Speedometers 2	0
Garage Equipment 6	2	Stoplights 4	0
Gas Filters 3	0	Tire Carriers 1	0
Gaskets 1	0	Tire Repair Equipment 3	0
Gasoline Gauges 2	1	Tire Handling Equip. (Portable) 3	1
Hand Tools 6	1	Tire Chains 3	0
Hardware 3	0	Tops 1	0
Heat Indicators 4	0	Trunks 2	0
Heaters, Car 5	1	Upholstery Materials 3	0
Horns 2	0	Valves, Engine 1	0
Ignition Equipment 2	0	Valve Reconditioning Tools 1	0
Jacks, Portable 2	0	Washing Outfits 4	1
Lighting Devices, Special 6	1	Water Pumps for Fords 2	0
Lubricators, Pressure, Garage 3	1	Welding Equipment 1	0
Lubricators, Pressure, Portable 2	0	Wheels 4	0
Luggage Carriers 1	0	Windshield Wipers 6	1
Miscellaneous Accessories36	5	Wrecking Equipment 2	1

n

to

nge is

ıal

ter ck-

Annual Salon a Garden of Color

Luxurious Equipment Shown on Powerful Chassis in Chicago Review of Industry's Most Expensive Vehicles.

By Norman G. Shidle

AN UNUSUALLY large proportion of town cars, continued emphasis on bright and varied body coloring and a particularly attractive setting from a decorative standpoint, are impressive features of the eleventh annual automobile salon which opened at the Drake Hotel, Chicago, January 30, and which will continue until February 6.

A large proportion of the exhibits duplicate those which appeared at the New York Salon in the middle of November, but several newcomers are present in Chicago including the British Bentley and some rather striking bodies on Marmon chassis by Robbins Body Corp. of Indianapolis. There were in all 20 exhibitors of whom six were car manufacturers, twelve custom body builders and two accessory makers.

The car manufacturers exhibiting in their own name included Bentley, Cunningham, Duesenberg, Isotta Fraschini, Minerva and Rolls-Royce. The chassis in the show on which the coachmakers showed their wares were Cadillac, Lincoln, Franklin, Locomobile, Marmon, Packard, Pierce Arrow and Wills Sainte Claire.

Coachwork exhibitors included Brewster, Brunn, deCausse, Derham, Dietrich, Fleetwood, Holbrook, Judkins, Le Baron, Locke, Robbins, and Willoughby. Accessories were shown by James Martin and the Specialty Manufacturing Co.

While closer cars of various kinds predominate at the Chicago Salon, a number of the custom builders are attracting attention with open jobs of vivid coloring and striking lines. This effort to brighten up the line and provide at least one real sport model seems to have penetrated even to those manufacturers who for many years have been famous for the conservatism of their body designs. In most instances a roadster is used as the sport model, although lively looking phaetons are shown in a few instances.

Town Cars Are Numerous

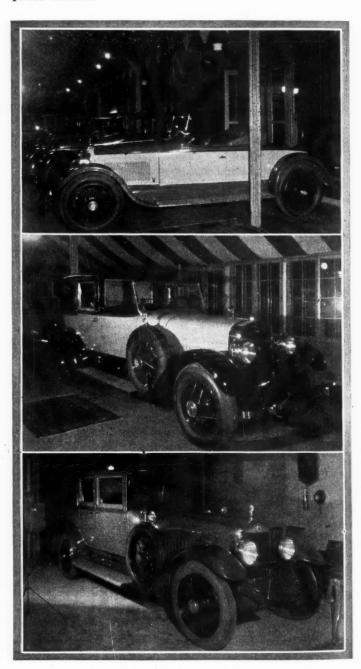
The large number of town cars exhibited is noticeable here as it was at the New York Salon. This trend may be due, some observers think, to the desire of the custom builder to lay emphasis on some design or model which production manufacturers are not very likely to copy. The production cars in the last few years have put into use a large number of the design ideas for improving lines, appearances and coloring which once could be found to great extent only in the custom field. In the desire and necessity for doing an individualistic job may rest the predominance of town cars in this year's custom exhbits. Being chauffeur driven jobs, the town car never is likely to be copied on production cars.

Particular attention seems to have been given to methods permitting open cars to be converted temporarily so as to offer protection from inclement weather. A greater number of roadsters and cabriolets than ever before are fitted with windows which can be lowered entirely out of sight. Side screens to operate with front doors are of course shown on many jobs.

An imaginative story teller might find inspiration for many fables in the variety of emblems carried on radator caps. The bathing-beauty motif was there along with mythical monsters and modern flying machines, while the less bizarre but more utilitarian heat indicator also appeared on many jobs.

The strong tendency to use bright hues and striking combinations of color which has been common to all types of cars for the last two years is further emphasized by the exhibits at the salon. Beauty and taste are embodied in practically all of

these color combinations shown at the Salon. Desire for vividness has not interfered with good taste in these high-priced vehicles.



Striking exhibits at Chicago Salon. Above, Duesenberg roadster; center, town car on Lincoln chassis; Bottom; Minerva enclosed car.

The READERS' CLEARING HOUSE

Questions and Answers on Dealers' Problems
BUILDING - ELECTRICAL - FLAT RATES
SHOP - LEGAL - PAINT & TRIM - ACCOUNTING

Finds Trouble After Six Years

Q.—Give method of adjusting Stromberg carburetor on 1920 Templar.—Harry D. Jones, Freeman, Wash.

This is a model M carburetor the adjustment of which was described on page 24 of the June 18th, 1925, issue of Motor Age. We are mailing you the page in question.

Q .- Customer states he had driven car for six years before he knew that more power could be obtained by adjusting the air shutter on the carburetor. stated this shutter had been nearly closed. His car lacked power on a hill and would run only 16 miles on a gallon of gas, while instructions say he should get 24 When opening this shutter slightly he noticed his power was greatly in-creased. Give method of adjusting this creased. Give method of adjusting this shutter. Will carburetor adjustment have to be changed when this shutter is opened? Will the shutter have to be changed for hot and cold weather?

This shutter is changed by hand for extreme changes in temperature. Ordinarily it would be fairly wide open for summer driving and nearly closed in cold weather.

Q. - Give method of determining whether a cylinder is worn so that it is not square with the crankshaft.

We believe that wear in the cylinder would be more likely to develop eccentricity or taper rather than throw the whole cylinder out of line with the crankshaft. However, checking would be difficult unless the engine is torn down and the crankshaft removed from the main bearings. With the cylinder block turned upside down and a straight edge laid in the main bearings, a square could then be used with one side lined up with the cylinder bore and the other side approximately parallel with the straight edge. If the second side were exactly parallel with the straight edge then it would show the bores to be correct as far as alignment with the crankshaft is concerned.

Q.—Why will some Fords coast better than others? I have noticed that some Fords roll quite easily in neutral, with the engine not running while others seem to drag. No amount of adjustment of clutch levers seems to effect a cure.

It is quite likely that in some cars which have been run for a period of time that some of the clutch plates are slightly warped, while another possibility is that the clutch plates do not slide freely, having slightly roughened the projections in the drum by which they are driven. A difference in the lubricating oil used will also make a difference in the freedom with which the car will roll. An oil which gets rather heavy when cold will cause the clutch plates to stick together. This is especially noticeable in cold weather when operation of the starter tends to move the car unless the emergency brakes hold very well.

MOTOR AGE READERS' CLEARING HOUSE

Meaning of numerals 1-21-26, p. 25 means that the article is in the January 21, 1926, issue of Motor Age on page 25.

Architectural
Filling station on plot 70 ft, by 150 ft. 1-2126, p. 25.
Garage 50 ft, by 140 ft, 1-7-26, p. 61,
Garage 75 ft, by 140 ft, 1-14-26, p. 27.
Garage with space for transient storage, 1-2826 p. 25.
Auburn, adjustment of Ross and Jacox gears,
1-7-26, p. 62.
Buick, 1922, overheats, 1-28-26, p. 24.
Buick wheel repair using tire pump. 1-7-26, p.
Cadillac grinding valves, 1-28-26, p. 26. Cadillac, grinding valves. 1-28-26, p. 26. Cadillac, transmission overhauling. 1-21-26, p. 26.
Chandler, knocks with change of gas. 1-28-26,
p. 24.
Cleveland, knocks with change of gas. 1-28-26,
p. 24. p. 24.
Dodge engine as power plant. 1-14-26, p. 26.
Dodge Brothers oil mileage guaranteed by reader.
1-21-26, p. 26.
Electrical
Bosch impulse coupling. 1-21-26, p. 27.
Bosch magneto, dual, how to reverse. 1-18-26,

Bosch impulse coupling, 1-21-26, p. 27.
Bosch magneto, dual, how to reverse, 1-18-26, p. 27.
Dodge Brothers gen, puts out but 4 amps, 1-14-26, p. 29.
Eloar gen, puts out but two amps, 1-14-26, p. 29.
Essex slx wiring diagram, 1-7-26, p. 63.
Fire, cause of on cars, 1-28-26, p. 27.
Ford with set spark mag, not recommended, 1-7-26, p. 63.
Magnet recharging, 1-7-26, p. 63.
Magnet recharging, 1-7-26, p. 63.
Magneto magnets weaken after years of service, 1-14-26, p. 29.
Magneto timing with impulse coupling, 1-21-26, p. 27.
North East gen, field fuse size, 1-21-26, p. 27.
Oldsmobile, 1925, timing, 1-21-26, p. 27.
Oldsmobile, 1925, timing, 1-21-26, p. 27.
Clidsmobile, 1925, timing, 1-21-26, p. 27.
Simplex wiring simplified, 1-14-26, p. 29.
Spark plugs with short electrodes needed for high compression, 1-14-26, p. 29.
Willys Knight gen, setting main brushes, 1-14-26, p. 29.
Engine overhaul, knock located by belt drive, 1-21-26, p. 24.
Essex carburetor maintenance kinks, 1-14-26, p. 28.
Essex, piston slap, cause of, 1-28-26, p. 26.
Essex, transmission, grease works into clutch,

28.
Essex, piston slap, cause of. 1-28-26, p. 26.
Essex transmission, grease works into clutch, 1-28-26, p. 26.
Falrbanks Morse engine, valve spring weak. 1-21-26, p. 24.
Flat rate, 1-28-26, p. 28.
Buick water pump operations. 1-28-26, p. 28.
Chevrolet rear axle operations. 1-21-26, p. 28.
Chrysler camshaft and valve operations. 1-14-26, p. 29.
Studebaker chassis operations. 1-7-26, p. 64.
Ford bands chatter after 200 miles. 1-14-26, p. 26.

p. 26. Engine, adjusting center main bearing. 1-28-26, p. 24. Main bearings, knock after fitting. 1-28-26, p. 24.

p. 24. Overhaul, piston pin loose In rod. 1-21-26, p. 24. p. 24.
With new rings pumps oil. 1-14-26, p. 28.
Franklin. 1916, carburetor adjustments. 1-14-26, p. 26.
Franklin, 1916, engine lubrication. 1-14-26, p.

26. Glycerine as anti-freeze mixes with water. 1-14-26, p. 26. Grant, 1921, bearing burns out. 1-7-26, p. 60. Legal

egal Accessory part of the car. 1-21-26. p. 25. Check given in payment with no funds in bank. 1-14-26, p. 27. Collecting storage charges in lowa. 1-28-26, p. 25. collecting stock traded for "Banker's shares." 1-7-

Ford stock traued for Cause of Page 26, p. 61.
Responsibility for cars stolen from garage. 1-7-26, p. 61.
Mystery tale, engine O. K. but misses. 1-28-26, p. 24.
Oakland axle adjustment. 1-14-26, p. 28
Parts. how to clean and protect from rust. 1-

Parts. how to clean and protect from rust. I-28-26, p. 28.
Reo, method of installing endless belt. I-28-26.
p. 26.

p. 26.

n. 28.

n. 28.

Runs with switch off. 1-7-26, p. 62.

Scripps Booth axle adjustment. 1-14-26, p. 28.

Star narburetor adjustments. 1-7-26, p. 62.

Studebaker chassis operation. 1-7-26, p. 62.

1920, spits on heavy pull. 1-7-26, p. 60.

Wheel wobble, cure recommended by reader.

1-21-26, p. 26.

Why Drive Shaft Pinion Worked Loose

Quite often in reading the Clearing House I think I could shed a little more light on some of the questions asked by the other readers, but I neglect to do so. I notice one in my last copy. M. R. Wilson of Miltonvale, Kansas, asks why the drive shaft nut works loose on a 1922 Chevrolet. Last year we had this same trouble on the same car twice. The first time I found the trouble and corrected it. The mechanic assembled the axle without testing the gear adjustment. This is done by bolting the torque tube to the left axle housing which has a differential assembly inserted through it. When I made this test I discovered that the pinion was meshing too deep, also that the pinion nut touched the differential case. In operating the car the friction thus caused between the nut and the case caused the nut to work

Undoubtedly this was caused by installing the new drive shaft and bearing. The remedy was four steel shims placed between the torque tube and the housing and two placed back of the differential thrust bearing. The torque tube shim gave the proper toe and heel gear adjustment. The shims back of the bearing brought the ring gear into deeper mesh to give the proper back lash and tooth adjustment. On other cars I have taken the rear axle apart and found the pinion so loose on the shaft that a piece of the shaft would fall out when removing the pinion, but I never knew of this to back off the nut.-H. A. Wayne, Brecksville, Ohio.

We are glad that you took the time to write us a letter for your solution is undoubtedly correct and will be of help to Mr. Wilson and other Motor Age readers.

WEIGHT REDUCED WITH HIGH SPEED SUPERCHARGER

Q .- For what reason do superchargers go so fast? Why do they not make them big and run slower?—Frank Holland. River Terrace, Tinwald. Canterburg. South Island, N. Z.

A high speed unit can be made lighter and where superchargers have been used the question of weight has been a big factor. Also in the centrifugal type of blower the volume of air delivered increases rapidly at high speed. The question of weight is probably the deciding one. If you had a power house in which to install a blower and ten square feet of floor surface to put it on, then you would probably design a slow speed blower.

GE



Legal Questions Answered

By WELLINGTON GUSTIN

COURT ORDER NEEDED

Q—On the 15th of last August I was authorized by the owner of a car to weld the motor leg, install new wrist pins, rings, and grind the valves. The order was not in writing. After thirty days had elapsed and he had not come for the car I phoned him and notified him that the car had been finished. To date nothing has been paid on the bill, and I have the car still in my possession. I do not care to sue the owner, as I think nothing will be gained. I have had that sad experience before. Please inform me in what legal and quick sure way I may collect the bill or confiscate the car.—James H. Hill, University Repair Shop, Evanston. Ill.

An order for repairs need not be in writing. But, if it be in writing and signed by the car owner, or his agent, it is best evidence of the terms of the agreement. This has its advantages in cases of dispute. Since you did not file your claim of lien with the recorder within the period of time prescribed by the statute in Illinois you have no statutory lien for repairs on the car in question. But since you have retained possession you have the common law lien which gives you the right only to hold the car until paid.

You cannot sell another's property without due process of law. Since you have not preserved your statutory lien you have no means of selling except through a court order. So you will have to sue to obtain judgment against the owner, then you may levy upon and sell not only the car you have in possession but upon any other property of the debtor above his exemptions, which you may be able to locate. Then your judgment is good for 20 years. Confiscation of another's property is not permitted under the law.

A MOOTED QUESTION

Q.—If I put a tire on a car and do not get paid for it at the time of installation do I have a lien on that car for 60 or 90 days whichever the law calls for? If I do then what if the party removes this tire and puts it on another car? Do I still hold a lien and on what?—Albert Schum Garage, Ivesdale, Ill.

The statutory lien in Illinois is for labor, skill or materials expended upon any chattel, or for storage furnished. This lien is good for one year from the completion of such expenditure of labor, skill or materials, or of such storage. But such lien shall expire after 60 days from the delivery of such chattel to the owner or his duly authorized agent, unless the lien claimant shall file a notice of his lien according to the statute in the office of the recorder of deeds of the county where the expenditures were made.

Note that this lien does not require the garageman to retain possession of the repaired property. The garagekeeper's lien is on the car and it makes no difference that the repaired parts are removed.

But you present the question of whether under the Illinois lien a tire put on a car is within the statute. I question whether it could be included under labor and materials furnished. The statute may be open to question on the point and the courts of appeal have not decided the proposition. A few states specifically include within the lien supplies and accessories furnished by the repairman and dealers.

I am of the opinion that in Illinois the legislative intent in making the law was to include only materials furnished in repairing property, that is, built into the repaired article. Now, if labor was required in selling and attaching a tire to a car, in the nature of repairs, then the statute might apply. Rather I a of the opinion that the transaction is more in the nature of a sale of an accessory or supply and that the labor of putting on the tire is a gratuity thrown in with the sale. But this is only an opinion of what a higher court would probably hold, and is given as a guide to your own acts, until an appellate or supreme court should settle the question.

SUIT SIMPLEST REMEDY

Q.—Will you kindly advise us as to the most simple way as well as the most inexpensive way to secure title to cars left with us for storage or repairs, whose owners have apparently left for parts unknown. We have three of such cars on hand at the present time with an estimated net value of \$100.00, and consequently do not want to spend any more than necessary to secure titles to same. Two years ago we had our attorney secure a title for us by writ of replevin and sheriff's sale, but in the windup we paid our attorney \$52.00 for costs, and sold the car for \$20.00 to get it out of the way. At present we have a Ford with a 1925 Florida license and two cars carrying 1925 Penna. licenses.—Jordan Garage, Wilkes-Barre, Pa.

It appears you have no statute giving you the right to sell property left with you to cover your charges for repairs, storage, etc. This is a very unfortunate condition for the garagekeepers, but perhaps the solons of the various states think evils might arise to the disadvantage of car owners should they make laws giving the garagekeeper the right to sell cars which he might claim were abandoned or unclaimed.

So you cannot pass title to a purchaser of a car left with you without a court order. This means that you must give the owner notice that you intend to dispose of his property. So a suit against the owner prosecuted to judgment and sale is the simplest and safest method to collect; albeit the costs may prove excessive. The court costs in such cases should be small and you should not employ any attorney whose fee eats up the repair charges, as in the case mentioned by you.

A QUESTION OF FACT

Q.—An owner left his car for storage. During the night a thief broke a window in the garage, unlocked the doors from the inside and in some manner unlocked a transmission lock which we had locked and stole the car. When the owner left the car with us for storage he left it unlocked. We went after him and requested the key so that we might lock the car at night.

Our regular policy of storage is first, all cars must be locked at night. Where we lock the car, the key is left safely in the office, second, we do not run twenty-four hours a day so we have never felt that our business was such to warrant a night man. The last man on duty checks all doors and windows, further checks the locks on all cars, third, regular storage customers who live in the neighborhood and who come after closing hours are provided with a pass key for the garage door. We have been operating six years under our present policy, fourth, we have a sign stating that we do not insure our customers' cars nor are we responsible for fire and theft of cars while in our place of business. Having seen your article in the Motor Age I was anxious to know of the outcome of similar cases. That is, the ruling of the judge or verdict of the jury. I realize it all sums up to what may be considered reasonable care. We feel that we are more cautious of our owners' property than they are themselves. Will you please give me what information you can on such cases? The owner threatens suit through his attorney. — Pennsylvania Reader.

In the case you present, the claim of damages, for loss of the car by theft while in your keeping is founded on negligence of you or your agents and servants. Your defense is naturally that you exercised that reasonable care to keep safely, required under the circumstances. Since the car was in your possession you can see that it is up to you to show that you were not negligent, which is another way of saying you exercised that requisite reasonable care. So, in law the burden of proof is said to shift to your shoulders to show you were not negligent. To make out a prima facie case, all the customer is required to do is to present the facts of leaving the car with you for storage and your failure to deliver it upon demand. Then if you can show the facts as you set out, which cannot be rebutted by the customer, then it would seem that a verdict would be returned favorable. But a jury must pass upon the facts, unless they are presented to the court, and a jury's verdict is an unknown quantity. All of this is anticipating a general charge of negligence. The customer may claim a particular element or ground of negligence which it would be incumbent upon you to overcome. But, if a jury should find that the facts show that you have exercised the care of a prudent business man in your line of business, or that you used as much care as the owner would himself, then the jury would be required to give a verdict in your favor.

F

Answers to Readers' Questions



The Right Way to Time Lincoln Valves

Q.—I am a reader of Motor Age and would like you to answer a few questions for me. I wish to know the best and quickest way to set the valve tappets on a Lincoln by the flywheel markings. I am with the Cadillac Motor Car Company, but the Lincoln differs somewhat from the Cadillac.—H. D. Williams, 210 Worten Bldg., Pawhuska, Okla.

The proper clearance is from .003 to .004 inches. In adjusting valves it is necessary that the cam roller rest on one of two small concentric arcs of the cam surface to obtain accurate clearance. See shaded areas on cam in the illustration.

To place the cam in this position proceed as follows: Open the priming cups on the cylinder block, and with the ignition switch "off" hand crank the engine watching the exhaust valve in No. 1 cylinder, right hand block. When nearly closed the letter "I" of the 1/5 center should be nearing the pointer. Tap the crank slightly until the letter "I" is directly under the pointer, then set the inlet valve clearance No. 1 cylinder at .003 to .004 in., using feelers of the proper thickness. Now the letter "E" is about 3 inches from the pointer. Crank the engine until "E" is directly under the pointer and set the exhaust valve clearance at .003 to .004 in.

ft

u

it

ia

of

ft

on

nd

at

to

m-

S-

ou

nt,

X-

re.

aid

011

ma

ed

ng

nır

en

ut.

us-

lict

ury

hey

y's

of

of

n a

gli-

pon

uld

ave

ess

hat

ner

be

vor.

GE

Taking the remaining cylinders in the following order, 3, 5, 7, 2, 4, 6, 8, repeat the above operation as outlined for No 1 cylinder. The two center and two outside valves in each block are the exhaust valves. Always watch the exhaust valve until it is nearly closed to determine the correct position for setting inlet valve clearance for that cylinder.

On Lincoln cars No. 20406 and later a camshaft is used on which each cam has the heel ground concentric so that the above precautions are not essential. However with men working on both types it is best to adhere to the flywheel markings in order to avoid error on the older cars. Where a new shaft is installed in an older car the valves are set with piston at top of compression stroke.

THE ESSEX OILING SYSTEM

Q.—I have a 1921 Essex four and it always throws the front connecting rod through the base. I rebuilt it twice and would like to know the cause for this. Is it the oiling system? I would also like to know what makes the engine rattle after being rebuilt. It only rattles when turning over at maximum speed.—Elmer W. Goetz, Olive Cycle & Motor Co., 1043 N. Grand Blvd., St. Louis, Mo.

The Essex oiling system is similar to the Ford in regard to the way the oil passes to the front of the engine and then through a series of troughs to the rear



Only one point on this Lincoln cam is covered for setting the tappet.

of the engine. A pump, however, instead of gravity sends the oil to the front of the engine. As the oil flows into the trough for the No. 1 connecting rod this rod splashes the oil out and it falls into little deflectors which send the oil to the No. 2 trough. The No. 2 connecting rod then splashes the oil and in this fashion the oil travels to the No. 3 and No. 4 rods. If at any time the oil should get low so that the pump would stop sending oil to the front cylinder we would find that the No. 1 connecting rod would give trouble first as it is the first one to be deprived of proper lubrication.

We would accordingly suggest your investigating to see if at any time the oil level has been allowed to get too low and would suggest your checking up the pump. The stroke of this pump is adjustable so as to pump more or less oil. Instructions for adjusting the oil pump to give it a stroke of 3/32 inch for ordinary usage or 1/8 inch for exceptionally hard driving were given in the January 18, 1923, issue of Motor Age. If you do not have this issue, we will be glad to send instructions or you can have the stroke of the pump adjusted by the nearest authorized Hudson Essex dealer.

We do not know what makes the engin rattle after you have rebuilt it. It depends of course on what you did in rebuilding. Perhaps this is a synchronous vibration produced by some metal part vibrating in sympathy with the reciprocating parts.

Q.—Is the camshaft the same in the high compression engine used from 1918 to early 1921 as it is in the low compression engine used from 1921 to 1923?

No. At about this time the front end drive was changed from gear to timing

chain so that the camshaft is left hand as compared to the previous one, as it rotates in the opposite direction.

Q.—What is the maximum horse power and speed of the two types of engines?
This information is not available.

Q.—What is the gear ratio of this car?

Q .- How fast should these cars run?

60 miles per hour or better.

Q.—I intend to build a dirt track race car out of one of these Essex fours and would like to know the difference between the two types of engines as I wish to change a 1923 Essex four and make it have the same speed that a 1920 has when in good condition.

The compression can be raised by using an old type connecting rod with a new type slit piston. This raises the top of the piston, cuts down the size of the combustion chamber, thereby raising the compression. When this is done, however, the top ring comes out of the cylinder bore so that the piston would lock and would not go down again. To overcome this you can use an extra gasket between the cylinder casting and the crankcase. It is also possible to use larger valves and to install a Hudson carburetor. More extensive changes would involve considerable expense and if you wish to go into the matter further let us know and we will refer you to the concerns which specialize on racing equipment.

Classify the Trouble First

Q.—We have a 1924 Hupmobile which runs and pulls well at speeds up to 45 miles per hour, but then it spits and misses. We have put in new points, new coil and new condenser, but it doesn't correct the condition.—M. J. Kithcart, Shelton Garage, Shelton, Nebr.

We believe it would be well for you to find out whether the trouble is due to ignition or not. To do this you should arrange a bracket of some sort which will hold a spark plug wire 1/8 in. away from the spark plug terminal. In this way the spark will have to jump this gap out in the air before jumping at the plugs. You can then roll up a piece of brown paper, about 3 ft. long and 21/2 in, in diameter and hold one end of this tube near the gap where the spark is jumping. Then run the engine at different speeds and listen at the other end of the tube to see if the spark misses. If the interrupter points are set too far apart it will cause the ignition to miss at high speed. Poor material in the points may also cause this condition. We do not believe the trouble is in the carbureter, but for your information an approximate setting is made by turning the main adjustment screw out three turns from its seating position and turning the idling screw out from 1 to 11/2 turns from the seating position.



Answers to Readers' Questions

Bearing Lubrication on the Supercharger

Q.—Is it possible to buy a supercharger suitable for a 165 cu. in. engine? If so, where? Where could a rotor only be obtained? What are the particular improvements developed by General Electric Company? How are the bearings lubricated and what means are used to prevent suction through the bearings and shaft side. Last summer I built and used a supercharger on a 165 cu. in. engine for dirt track racing with considerable success, but have had a lot of trouble getting a rotor that would stay together.

An aluminum rotor would not stand at all and several built of spring steel have only lasted a short while. The present one is built with a steel hub and flange and steel blades brazed into slots but is too heavy. The car is geared 4 to 1 and will make around 100 miles per hour, which would make this engine turn about 4500. Supercharger is geared 8 to 1 and is seven inches in diameter.—L. H. Clarkson, North Bend Garage, North Bend, Wash.

We are showing an illustration which gives the cross sectional view of the supercharger used on Duesenberg cars in the last Indianapolis race, this illustration being reproduced from engineering information supplied by the New Departure Mfg. Co., of Bristol, Conn. In this installation it will be seen that ball bearings are used and the method by which they are lubricated is extremely interesting. Due to the extremely high speed at which they operate, it is essential that oil be delivered in exactly the

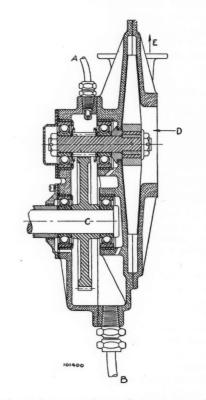
Method of Oil Admission

right quantity.

Too little oil would of course, cause trouble, while the effect of too much oil would cause overheating due to the friction of the balls being driven through the oil. The problem is handled by admitting oil through a pipe A and then through a small orifice to the small gear on the rotor shaft. The oil striking this gear is broken up into a fine spray and the oil spray lubricates the bearings. The impeller shaft bearings because of their proximity to the pinion tend to receive a greater amount of oil than the two lower bearings. Because of the difference in speed between the shafts this is the reverse of the conditions desired. For this reason pressed steel slingers are fitted between the bearings and the pinion, thus deflecting a portion of the oil which would otherwise reach them. Outlet shaft B is large enough to prevent oil accumulating and rising far enough so that it would be interfering with the rotation of gear C. Opening D is the place where the mixture from the carburetor comes to the supercharger and opening E is the outlet where the mixture is driven to the engine. In determining the right size of jet used in oil inlet A, thermo-couples are used, placed against the bearing outer races to check the bearing temperature with that of the oil supply.

WHAT KNOCKS THE HEAD OUT OF THE PISTON

Q.—We have a 1920 Essex four and have broken four pistons during the last 3000 miles the car was driven. This has always been No. 1 piston. The first piston that broke was an aluminum alloy piston of well known make and it was smashed into very small pieces. We then installed a set of light weight pistons of another make in the car and shortly afterward a small hole broke out in the center of one of these, the hole being about the



Supercharger on Duesenbergs, equipped with New Departure bearings.

size of a lead pencil. The head was also cracked at the same time. We then installed another piston of the same make and that also cracked. We then went back to the original make of piston and yesterday No. 1 piston broke again. We are unable to locate the cause of the trouble.—Boulder Junction Garage, Boulder Junction, Wis.

One possibility is that a valve is striking the piston. Perhaps the spring is weak or perhaps the valve has been replaced at some time with one which has too high a head. We would suggest your removing the cylinder head and putting on top of the piston a lump of putty or wax, then replace the cylinder head and turn the engine over two or three times. Then remove the cylinder head and examine the piece of wax or putty to see how near the valve has come to touching the piston. If you find the valve comes within a 32nd or a 16th of the piston it is quite likely that it strikes the piston at high speed.

Adjusting Columbia Axle on Auburn

Q.—Supply diagram showing adjustment of rear axle and pinion on Auburn 6-66 and 8-88, as I am not familiar with the Columbia rear axle adjustment.—M. D. Leasure, 418 Laurel Blvd., New Castle, Pa.

Before attempting to adjust the gears it is well to see if the pinion shaft bearings need adjusting. The amount of play or looseness may be determined by tapping with a wooden mallet against the companion flange of the universal joint. Then by grasping the propeller shaft with both hands and shaking back and forth you can tell whether there is any appreciable looseness. If adjusting is required it is necessary to first loosen the pinion shaft lock nut and back off the outer nut just far enough so that the lock washer can be backed off from the dowel in the inner nut. Then turn the inner nut in a clockwise direction until it just fits snugly. Then back off this nut 1/6 of a turn. Again check for looseness. Next tighten the outer nut and center punch the outer lock nut on the side so as to throw metal into the slot on the lock washer.

If after making pinion bearing adjustment you decide that a gear adjustment is necessary, then proceed in accordance with following instruction:

Gear Adjustment

Loosen the clamp bolt nut on outside of housing, and hit the head of these bolts several times with a hammer to be sure that the bearing cup is free. Then remove the pinion adjuster lock, and, using a small bar, turn the slotted adjuster to the right if you desire to move the pinion gear forward (toward front end of car) or to the left if you desire to move pinion gear backward (toward the rear end of the car). As a general rule move the pinion forward for coast noise, backward for drive noise. Move only one notch at a time, then test.

Now tighten up the clamp bolt nuts, pour good clean oil through the holes in the adjuster onto the pinion bearings, then replace the adjuster lock and run the car a short distance in high gear. If objectionable noise has been eliminated, make no further adjustments, but if some of the excess noise is still in evidence repeat the adjustment described above, but move the adjuster only one notch at a time (not complete turns) in one direction or the other until the quietest running position has been secured.

Never run the car without first tightening up the clamp bolts and locking the adjuster with the adjuster lock. You cannot test your adjustment by running the axle on the jacks, so an actual road test is necessary after each adjustment.

Be sure that dirt, grit, or other hard substances are kept out or these particles will destroy the bearings or gears.

Clearing Up Electrical Trouble

EDITED BY A. H. PACKER



Here and There in Electrical Trouble Shooting

Q.—In a recent argument with a friend I stated that it was possible to obtain two shocks from two electrical units on the car, that is, from the ignition unit, either the high tension terminal on the coil or the distributor plug, and also from another unit on the car. My friend maintains that you can only get a shock from the ignition unit. The car in question is a Courier six, being equipped with battery ignition, generator, cutout, electric horn and necessary wiring. I put down these details to enable you to have no trouble in answering the question. Where is the other place?—Frank Holland, River Terrace, Tinwald, Canterbury, South T, N. Z.

S

)f

y

st

al

er

re

st

at.

m

rn

on

off

or

ut

on

he

st-

ent

ce

ide

ese

be

nen

nd,

ad-

ove

ont

sire

ard

eral

past

ove

nts.

s in

ngs,

run

ear.

imi-

but

l in

ibed

one

) in

niet-

ired.

ght-

king

You

ning

road

nent.

hard

icles

4GE

ck s

Whenever you run current through a magnetic circuit or through a coil wound around a piece of iron you will always find that there is a high voltage generated when a circuit is broken. This is the way the high voltage is generated in the secondary of the ignition coil and at the same time there is a fairly high voltage generated in the primary. If you moisten your fingers and put them across the interrupter points of the ignition unit while it is running you will probably get a shock there as well as from the high tension.

In the cutout which connects and disconnects the generator there is also a fine winding on the magnetic circuit. You can accordingly get a shock by putting your fingers on the cutout terminals and opening and closing the points. It is also possible that you can get a shock from the field of the generator. The Clearing House editor has personally had the experience of getting a shock from the cutout although he does not recall whether he has received a shock from the generator field or not. The voltage generated at the cutout will probably run from 100 up to 200 or 300 volts and is strong enough to be felt although it does no harm.

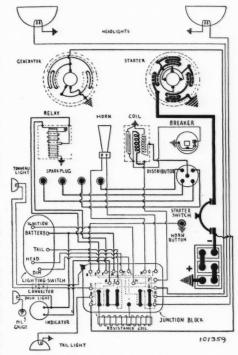
Don't Leave Ignition Switch On

Q.—If a car is left with ignition switch turned on for any considerable length of time and the ammeter shows discharge due to the contacts touching, is there any danger of the coil heating and raising the resistance of the primary so as to make the engine hard to start?

The effect is to heat up the coil but the chief damage is in the wax insulation between the layers of secondary winding. At high temperature this insulation is not so good and the spark will be very weak. There is of course, also some effect in heating up the winding so that it does not draw enough current. In most cases the coil will recover if allowed to cool thoroughly.

Q.—If the heat generated in a simple, circuit proportional to the square of the current and the resistance?

Yes. To explain this we might say



The big junction box makes it easy to recognize this Studebaker wiring diagram

that a current of one ampere will produce a certain amount of heat while a current of two amperes through the same circuit will produce four times the heat. On the other hand the current of one ampere through a certain resistance will cause a certain amount of heat and twice the resistance will cause twice the heat.

Q.—Is a coil designed so that it gives up its heat about as fast as the current and resistance generate it? We have often left the switch on all night and it did not seem to alter the efficiency of the spark coil.

This will vary with different coils. Some stand the heat better than others. In any case it is not desirable to do this if it can be avoided, for heating the insulation weakens it and the coil may puncture at some later date.

Q.—The ammeter of the Courier car we have is not connected by wires, but one wire passes through an iron ring at the back. How does this work?

This is not an iron ring. It is the back of a U shaped piece of iron and the wire carrying the current and running through the back of this U shaped piece of iron makes a north and south pole at the end of the U. This north and south pole will vary in strength depending on the strength of the current and the magnetism of this U shaped piece of iron will then deflect the needle a certain amount depending upon the amount of the magnetism. This is the Westinghouse type BT ammeter. The name of a book on electrical trouble shooting

which describes this meter will be given by separate letter.

Q.—Do you think 36 c.p. lamps are too strong on 6 volts? Would you prefer 21 c.p.?

In many states in the United States 21 c.p. lamps are the maximum that can be legally used. We do not believe there is any need for 36 c.p. lamps if the 21 c.p. bulbs are used in suitable lamp equipment with the right kind of reflectors and lens.

Q.—Would a 6-volt, 90-ampere hour battery start a car any quicker than a 6-volt, 60-ampere hour battery?

As long as the 60 ampere hour battery could turn the engine over at a fair rate of speed there would be no difference. However in cold weather the 90 ampere hour battery would have the better chance, for the plates would have only two-thirds of the load per square inch of surface.

Generator Brush Squeak— Another Mean Problem

Q—We have a Studebaker light six which has a peculiar high pitched squeak and we cannot remove it. It comes from the generator and although we have tried changing brushes we cannot remove the squeal. It is loudest at a car speed of 15 miles an hour. Can you suggest something?—Marx & Stampa, Cedarburg, Wis.

We have had this matter up with a number of experts on electrical work and they have no suggestions to offer except the one you have already tried of changing brushes. While this trouble is not often encountered it is sometimes stubborn and difficult to overcome in exceptional cases. At times three or four sets of brushes will be tried before a set is found which will work out properly. We are going to suggest something as an experiment which you may try if you care to. The brush is fastened to the brush holder by means of a screw.

We would suggest trying a piece of paper between the brush and the holder or else a thin piece of rubber. This will of course act as an insulator and you will have to see that there is some other good connection between the brush and the holder. Our thought is to cushion the brush and if possible, prevent the high frequency vibrations which produce the noise. Another suggestion would be to wrap a bit of tape around the brush arm with the same idea in view of damping the vibration.

WIRING OF 1918 STUDEBAKER

Q.—Give me wiring diagram of Studebaker four 1918 model.—Marrowbone Garage, Marrowbone, Ky.

Diagram is published at the top of this page, in accordance with your request.

1600 at Sales Rally Which Sounds Gong for Chicago Show



C. F. Kettering, president General Motors Research Corporation

CHICAGO, Jan. 29.

WHAT is said to have been one of the largest local meetings of dealers and salesmen in the history of the industry was held last night in the Gold Room of the Congress Hotel under the auspices of the Chicago Automobile Trade Association.

It was the annual event which has come to be regarded as the curtain raising feature of Chicago's national show as well as the gong which sends salesmen of this district into the task of a new year with increased pep and enthusiasm. With new merchandising inspiration as its chief objective the gathering last night met with marked success for apart from the frolic of the affair the selling messages of speakers were heard by more than 1,600 salesmen and dealers who listened with serious attention.

Consequently, quite a number of the salesmen who attended the rally will go on the floor of the show which opens Saturday at the Coliseum fully primed and cocked for that specialized job. In most cases they will have the advantage not only of the final grooming at the Chicago association's great meeting but of considerable pre-show coaching and special preparations otherwise to make

Curtain Raising Event of National Exhibit Scores Record Attendance and Grooms Forces for Big Merchandising Efforts

the best of the opportunity awaiting them. The Chicago association believes that by such pre-show intensification there will be accomplished the double advantage of larger sales on the floor of the show and of better prepared salesmen for the work of the year in this field.

From the standpoint of the industry and trade at large the meeting scored benefit through the broadcasting of speeches. Radio fans heard things about automobiles and the automotive industry that are bound to have been impressive and which were designed to strengthen the public's tie of friendship. And locally the broadcasting did a work which likely will be reflected in the public's attendance at the show.

The meeting was presided over by C. E. Gambill, president of the Chicago trade association and president of the National Automobile Dealers' Association. In announcing the attendance of more than 1,600 dealers and salesmen Mr. Gambill pointed out that the attend-



Harry Collins Spillman, merchandising director Remington Typewriter Co.



C. E. Gambill, president C. A. T. A. and N. A. D. A.

ance exceeded that of last year's curtainraising rally by 400, also asserting that with its membership of 634 dealers the Chicago association is the largest organization of its kind in the world.

C. F. Kettering, president of General Motors Research Corporation and Harry Collins Spillman, merchandising director of the Remington Typewriter Company, were the speakers of the evening.

Mr. Kettering drew a graphic picture of automotive development, taking his audience down the path of progress from the industry's infancy on to the present time.

Following up Mr. Kettering's tribute to the high class of merchandise the automotive tradesman has to sell Mr. Spillman drove home the point that "no dealer has as good a sales organization as he has merchandise to sell." While horse power has been developed to a stage of 90 per cent efficiency he asserted that man power, and he meant man power in merchandising, has not advanced more than 10 per cent.

While admitting improvements in selling efficiency Mr. Spillman left the idea that merchandising has a long way to go before it approaches the level of perfection.

EDITORIAL

Selling Maintenance on Time

THE time payment plan of selling maintenance is not yet old enough to justify a proper appraisal of its all-around merits. It has been tried out here and there from time to time but there has been no popular tendency on the part of dealers to take it up. One dealer who gave this plan a fling and who finally decided it was impractical from his standpoint sets forth one very reasonable objection. While the services of his shop are protected by a lien on the car and while collection under the lien could be exercised through processes of law he finds that pursuit of such collections tend to destroy the friendly feeling of service patrons counted as eventual buyers of new cars. his analysis, after considerable experiment and study, is that the time payment plan for maintenance sales does not belong in the new car merchant's program.

This particular objection is not one, however, which would stand in the way of the exclusive maintenance house. Even in the case of such an establishment the tradesman would have to watch his step from a credit standpoint. A lien on the car in a great many instances would not be sufficient protection. Among suggested methods for improving this protection is to require the indorsement of a property owner or follow the plan of some money lending organizations which require indorsement of two or more salaried persons of good standing. Between these two processes the property owner's indorsement has the strongest appeal, although under any arrangement the house has on hand a proposition calling for its best effort in credit management.

It is plausible that the automobile dealer in pressing such claims might do damage to a large group of new car prospects. As far as he is concerned the dealer to whom we have referred has given us something to think about.

Or. the tradesman might put it this way: "In association there is strength."

Trying to Stretch the Truth

In a recent criticism of American rubber manufacturers for not taking advantage of the 22-cent price in effect eighteen months after passage of the Stevenson restriction act, Sir Robert Horne, former chancellor of the exchequer, declares there has been no British discrimination against the United States.

He resents the statement frequently made, that the Stevenson act is government price fixing on the part of the British. He declares that the fundamental cause of the rise in crude prices is the enormous increase in automobile production and the introduction of the balloon tire.

"The British manufacturer gains no benefit at the expense of the American, and the American suffers no prejudice at the hands of the British," he said. He contends that until a few months ago, American buyers could have purchased the entire output of almost all the plantations for five years ahead at 36 cents. He insists that the present trouble is the result of gambling by the Americans in the belief that they could continue to get rubber at the 22 cents asked eighteen months after the passage of the act.

Figures recently quoted by Sir George Beharrell, managing director of the Dunlop Rubber Co., show that "the total increase in tire prices as compared with October, 1924, is 49½ per cent in England, while in France the increase varies from 98 to 138 per cent, and in America, approximately 61 per cent."

From this statement it appears that the British buyers were warned in time to prevent so great a shortage as exists in America and therefore tire prices did not rise so high there. France seems to be in the class of America as an "unfavored" nation, only more so.

Sir Robert also asks, "What prejudice is the American citizen suffering today greater than that of his competitors in Britain and elsewhere?" With American prices 61 per cent greater than 1924, and British prices but 49½ per cent more than 1924, the answer to that question is obvious.

In order to be consistent, British rubber authorities should get together and tell the same story.

Now is the time for the ambitious salesman to cash in on the prospects obtained at the shows.

The World Needs Us

ORE than half a million motor vehicles were exported from the United States in 1925. The indications are our exports of automobiles and trucks this year will exceed that number. There has just been held in New York City, at the time of the National Automobile Show, the second world motor transport congress. This congress brought to America men from nearly all the civilized countries of the world to study our wonderful automotive industry. The result is bound to be a great stimulating of foreign interest in cars made in America. We are so far ahead in the economical production of motor vehicles that no other country can begin to equal our prices. Although high import duties have been levied against American motor vehicles in nearly all European countries the fact remains that American manufacturers still are able to sell American vehicles in those countries in competition with their home products. The world needs motor transportation and only America is able to supply it in quantity at acceptable quality and price.

February 4, 1926

A.

tain-

that

the

gani-

ieral

arry

riter

the

cture

his

from

esent

ibute

the

Mr.

t "no

ation

While

to a

serted

man

t ad-

sell-

e idea

ay to

f per-

AGE

Car Sales Maintain Seasonal Records

Production Speeded Up to Cope With Unusual Demand

Few Price Changes Stabilize Conditions and Help Stimulate Business Volume

NEW YORK, Feb. 4.—Unusually good sales of motor cars for the season of year continue to support the optimism with which leaders of the industry are considering the prospects for the year ahead. Production has been speeded up to record winter levels but is not running ahead of sales to a dangerous extent.

Aside from the general prosperity of the country, the excellent market for automobiles is credited to the low prices of closed cars, which are normally in greatest demand at this time of year. There have been no price changes of particular significance since the closing of the New York show, and this stabilizing factor has helped to stimulate sales.

The heavy production schedules of the factories are regarded with less misgiving than has been the case in other years of similar tendency not only because of the good sales situation, but also because the producers were never before in condition to curtail output at such short notice. Manufacturing processes have been speeded up so much during the last two years that most factories are able to shift from a high to a low production rate in approximately 10 days, this representing the period between receipt of raw material and the assembly of the finished product. The time two years ago averaged about 30 days.

Will Sell Stutz

PHILADELPHIA, Jan. 30.—P. L. Austin, who has been in the automobile business seven years and had recently announced his intention to enter another business, has reconsidered and has become sales manager of the S. R. Blocksom Motor Co., distributors of the new Stutz car.

Chrysler Leaves on Tour ..

CHICAGO, Feb. 3.—Walter P. Chrysler, president, and J. E. Fields, vice-president in charge of sales, Chrysler Corp., are leaving this week for an extended tour of the far west during which meetings with distributors and dealers will be held.

Would Issue Notes

LOS ANGELES, Feb. 1.—The board of directors of the Goodyear Tire and Rubber Company of California is asking consent of stockholders of the company to create unsecured five-year notes in the amount of \$5,000,000 to provide additional working capital, to provide means for taking up of outstanding notes and to enable the payment of unpaid back dividends on its preferred stock.

Dealer Insists On No. 13

JAMESTOWN, O., Feb. 1.-After possessing license plates for dealers No. 13 for 14 years, N. H. Hunter, automobile dealer of Jamestown, is thoroughly convinced that 13 is not an unlucky number in any respect. He boasts that in the 14 years of driving when No. 13 was displayed both at the front and back of the car he has not suffered so much as a scratched fender. The tags have been on approximately 3000 cars as the number is used for all of the cars demonstrated and used by the salesmen of the company. license number has also been used for "in transit" cars also without any accident. Just 14 years ago that number was given Mr. Hunter by accident and each year a request has been made to the Ohio Registration department for the same number which has always been granted. The number is believed to be a good advertising medium.

Danville, Ill., Plans Show

DANVILLE, Ill., Feb. 1.—Automobile dealers and agents in this city and Vermilion County have united in staging a spring show, Feb. 18-21 and John L. Barkman, chairman of the general committee, and his aides are busy on plans for the event. It is planned to have a complete display of cars and accessories. The show is dated to run through Sunday so that hundreds may have opportunity to visit the show at their leisure in the daytime.

Strom Office Moves

CHICAGO, Feb. 1.—The Strom division of the Marlin-Rockwell Corporation has moved its Philadelphia office to 1211 Franklin Trust Bldg., 15th and Chestnut Streets. A. W. Wiese will continue as manager in that territory.

German Output Low

WASHINGTON, Feb. 1.—Automobile production in Germany is practically at a standstill with 20 plants or half the total industry bankrupt or under receivership and the remainder working part time, according to a cable just received here by the automotive division of the Department of Commerce from consular sources.

Sanders Is Promoted

CHICAGO, Jan. 30.—Charles Sanders, retail sales manager of the Cadillac Motor Car Co., Chicago branch, has been promoted to the position of sales manager of the branch.

Marmon Separates Divisions Into Two New Corporations

Automobile Department Will Be Known in Future as Marmon Motor Car Company

INDIANAPOLIS. Feb. 1.—The Marmon expansion campaign for 1926 entered a new phase today when articles of incorporation for the two separate divisions of the concern were filed with the secretary of state. The automobile division of the old Nordyke & Marmon Company becomes the Marmon Motor Car Company, while the mill machinery manufacturing division is to be known as the Nordyke & Marmon Corporation.

The change comes while the concern is celebrating its seventy-fifth anniversary, and shortly after the close of the year of greatest success in the manufacture of the Marmon car. Company officials insist that the new plan is in no sense a reorganization but simply a segregation of the responsibilities.

The officials of the newly named motor car company are: W. C. Marmon, chairman of the board of directors; G. M. Williams president and general manager; H. L. Purdy, vice-president and assistant manager; A. R. Heiskell, vice-president and secretary; Howard Marmon, vice-president; Homer McKee, vice-president; C. J. Sherer, treasurer, and C. Badger, assistant treasurer.

According to G. M. Williams, president, the Marmon Motor Car Company starts most auspiciously under its new name with a production schedule involving the manufacture of more than \$12,000,000 worth of motor cars during the first six months of the year. This is based on actual orders booked up to June 1.

Counterfeit Being Sold

NEW YORK, Feb. 1.-The Moto Meter Company, Inc., Long Island City, has received information, according to E. V. Hennecke, vice-president, that one or more salesmen operating in Chicago territory are selling counterfeit Boyce moto meters. Mr. Hennecke says samples show an attempt to duplicate the genuine Boyce moto meter in every particu-He adds that these samples are packed in containers stamped, "Factory Equipment," a mark which has never been used on the original Boyce moto "This counterfeit," says meter cartons. Mr. Hennecke, "can be distinguished by its inferior workmanship and inaccuracy and by the fact that it weighs 13 ounces, wheras the genuine Boyce moto meter, universal model, weighs only 12 ounces. Great care should be taken to avoid being deceived by this counterfeit, as its sale by anyone is not only an infringement both of the Moto Meter Company's patents and trade mark rights but also constitutes unfair competition."

Cadillac Reports Fewer Cars On Hand Than Ever Before

January Best for Deliveries of Any Initial Month in Company's History

CHICAGO, Feb. 1.—H. M. Stephens, general sales manager of Cadillac Motor Car Co., reported at the opening of the Chicago show that at present there are fewer cars in distributors' and dealers' hands than ever before in the history of the company and that January will be the best initial month of the year with respect to deliveries that the company ever has experienced.

f

e

fi-

10

or

M.

r;

nt

ent

ce-

at;

ent.

rts

me

the

000

six

on

eter

or

ter-

noto

ples

enu-

ticu-

are

tory

ever

moto

says

d by

racy

nces,

eter,

nces.

d be-

s its

inge-

any's

also

AGE

He looks for a healthy condition to prevail in the automotive industry generally throughout 1926 and remarked that there is less unemployment in Detroit than ever before which is significant in that it indicates that automobile factories are going at high speed to meet the demand of the public.

Cadillac, he said, favors a stiffening in the requirements with respect to time financing of automobiles, particularly as to the amount of the initial payment.

No changes in personnel were announced at the time of the opening of the show and none are contemplated in the near future.

On January 29 a pre-show dinner was tendered by the Chicago branch of Cadillac to dealers and salesmen at the Blackstone Hotel, at which sales plans in connection with the show were discussed and the salesmen schooled with reference to the selling methods to be used in connection with the approach to prospects developed on the floor of the Coliseum. Charles F. Kettering, president of General Motors Research Corporation, gave a history of the growth and development of the Cadillac company and a sales talk also was made by Mr. Stephens.

Sells Car in 4 Minutes

CHICAGO, Jan. 30.—Within four minutes after the Chicago show opened today Floyd D. Cerf., president of the Stutz Chicago Factory Franch, Inc., had sold one of the new Stutz cars at the Stutz booth. The purchaser was John F. Tyrrell, a Chicago lawyer.

The Chicago Ttutz organization has set out to sell at least 300 cars during the show. Their ambition is to surpass the record of any other show. Sales reported at New York, during show week, were 175, at Philadelphia 177, at Milwaukee 36, at Cincinnati 17, at Columbus, Ohio, eight at Kalamazoo, Mich., seven.

The Stutz company is rapidly increasing its dealer organization and expects to sign several new contracts this week.

Miles Watches Opening

CHICAGO, Jan. 30.—When the doors of the Chicago show were opened today Sam A. Miles, manager of the shows for 26 years, stood in the main hall a few feet from the entrance. Here unnoticed by the crowds that poured through the

Buffalo Show Is Great Success



Interior view of Buffalo, N. Y. automobile show described last week.

gates he watchd the start of the show to be sure everything was moving smoothly. The smile with which he greeted the few who recognized him showed how well pleased he was.

Davis Revises Line

CHICAGO, Jan. 30.—The Davis Motor Car Co., Richmond, Ind., announces models and prices on its complete line of motor vehicles are as follows:

Series 92

Model	Price
Imperial Sedan	\$1795
Sedan	. 1595
Man O' War Roadster	. 1495
Legionaire Touring	. 1495
Series 93	
Model	Price
Four-door Sedan	\$1285
Three-pass. Coupe	. 1285
Five-nage Touring	1995

Colonel Will Brown Joins Chicago Marmon Sales Firm

CHICAGO, Feb. 1.—The Smith-Sauer Company, many years on Chicago's Row as Marmon distributor, has been reorganized and is now known as the Smith-Sauer-Brown Motors Co., 2349 South Michigan Ave. The new member of the firm is Col. Will H. Brown, a figure in the automobile industry for many years.

He joined the Pope Motor Car Co. in 1900 as purchasing agent; he joined the Willys-Overland Co. in 1907 and left this connection to manufacture the Brown commercial car by his own company. In 1917 he was sent to France by the United States government as chief motor transport officer with the rank of colonel. He left the army in 1919 after serving with the Liquidation Commission in Paris with Brig.-Gen. Charles G. Dawes, now the Vice-President. He is holder of the Distinguished Service Medal and has been given citations both by General Pershing and the French government.

Upon his return to the United States, Colonel Brown joined the Marmon concern at Indianapolis and recently left the factory to join the new Chicago company as treasurer.

Counties to Get Funds

COLUMBUS, O., Feb. 1.—One of the benefits of the new automobile registration law in Ohio, which officials of various counties are just beginning to realize is the fact that the money received from the sale of automobile tags is to be distributed to the various counties promptly, instead of being placed in the state treasury and then distributed later. While the money so received was in the state treasury the state received the interest thereon while under the present law the counties will benefit by the interest on the funds when deposited in banks.

Spokane to Have Show

SPOKANE, Wash., Feb. 1.—Arrangements have been completed for the holding of an automobile show here February 15-20 at which cars of at least 32 makes will be shown, the Spokane Automobile Chamber of Commerce sponsoring the affair. The holding of the show was made possible by the offer of the new two-story building of the Wells Chevrolet company.

Mack Truck Changes

SEATTLE, Feb. 1 .- Complete reorganization of the Mack Truck Company's Pacific Coast organization was announced at a three day conference of the Mark truck dealers and officials which convened at the Olympic Hotel. R. E. Boydston, of Los Angeles, was named manager of the Seattle branch succeeding C. C. Eickelberger, who has been promoted to the position of special representative and territorial supervisor of the Pacific Northwest district. W. P. Sheehan, who has been branch manager at Tacoma, Wash., will become manager of the Portland branch, succeeding H. H. Harwood, who becomes assistant to J. A. Stoner, vice-president and general manager of the Pacific Coast organization with headquarters at Los Angeles.

Fashion Show to Feature Syracuse Car Exhibition

Special Motor Boat and Gasoline Engine Section Also will Be Included in Display

SYRACUSE, N. Y., Feb. 1.—Motor boat displays and a fashion show will be features of the 1926 Syracuse automobile show at the State Armory beginning February 8. The Fashion show, it has been proved by experience, is a big factor in drawing the women to the exposition. Winners of beauty contests in this part of the state will serve as models for the latest styles in women's dress.

This will be the first year a special motor boat and gasoline engine display has been arranged. Changes in the construction of the building permits bigger display than in previous years. A special commercial car show will be an added feature. The special accessory exhibition promises to be much more extensive than ever before.

Practically every dealer in this section will show at the exposition. A number of dealers who are handling radio as a sideline are arranging special exhibits of this kind.

Oregon Sales Show Loss

SALEM, Ore., Feb. 1.—Passenger car sales in Oregon during 1925 were less than in 1924, but commercial car sales showed an increase. For the entire state, passenger car sales totaled 29,870 as against 31,028 during 1924, which was a banner year in Oregon. Commercial car sales totaled 2,495 in 1925 as against 2,201 the year before, a gain of 294. The total passenger car and commercial car sales showed a loss of 864, with a total of 32,365 sales during 1924.

Hupp Dealers Meet

BOSTON, Feb. 1.—All the New England dealers affiliated with the Jeffrey-Nichols Company, distributor of the Hupmobile line, came to Boston recently for a dinner and a conference on plans for making 1926 a bigger sales year than ever. Addresses were made by Mr. Jeffrey, Mr. Nichols, Myron Smith and Fred E. Mason in charge of the wholesale and retail sales forces. There were more than 100 present.

Indiana Plans New Law

FORT WAYNE, Ind., Feb. 1.-Indiana motor car dealers are now considering new legislation on installment-plan selling of automobiles, a crisis being created by recent decisions of Indiana courts. Under decisions prosecutions for removal from the state of automobiles purchased on conditional payment contracts is practically impossible. The Fort Wayne Auto Trades Association, working with finance companies of the city, is now drafting new legislation on the question. Within the last three months convictions have failed to materialize in five cases where cars were removed from the state without written permission of

Daniel Guggenheim Adds \$2,000,000 To Aeronautic Foundation

NEW YORK, Jan. 30.—Daniel Guggenheim, who last summer gave \$500,000 to establish a school for aeronautics at New York University, announces in a letter to Secretary of Commerce Hoover that he has decided to establish the Daniel Guggenheim Fund for the Promotion of Aeronautics and to place at its disposal the sum of \$2,500,000.

Trustees not yet named will incorporate the foundation under New York state laws. At their immediate disposal will be \$500,000 to defray expenses of studies and any work necessary at once and the remaining \$2,000,000 will be subjected to the developing needs of their work in promoting the aims of the fund.

This aim is to co-operate with all branches of the federal government and the public generally in bringing about such an advance in the art of aeronautics that private enterprises will eventually find it practicable and profitable to carry on.

Any earnings will be turned back into the fund and Mr. Guggenheim does not intend that it shall be permanent. Mr. Guggenheim would have the trustees through a simple, inexpensive organization, and depending on outside agencies whenever possible, promote aeronautical education both in institutions and among the general public, assist in the extension of fundamental aeronautical science and the development of commercial aircraft and equipment, further the application of aircraft in business, industry and other economic and social activities, avoiding work which is properly a governmental function and restricting attention to civil activities.

Although in advance of the naming of the trustees and their organization for actual work it is impossible to outline their specific immediate activities, Mr. Guggenheim believes that establishment of other air schools such as that at New York University may be warranted in the near future and that opportunities for new fields of employment for American young men should be developed in the air

selling companies or finance concerns holding notes. Finance companies have served notice on the automobile firms that further protection must be provided or the finance companies will be compelled to refuse automobile paper.

Flint Plans Bond Issue

FLINT, Feb. 1.—By a large majority, the shareholders of the Flint Motor Co., voted at a special meeting to approve a resolution to float a bond issue of \$2,500,000 to be used to repay the indebtedness of the corporation to Durant Motors, Incorporated. The bonds will be protected by a mortgage covering the factory and equipment of the Flint Motor Company.

Chandler Announces Merger

NEW YORK, Feb. 1.—In a letter to stockholders, F. C. Chandler, president, Chandler Motor Car Co., announces that the plan for consolidation of that company with the Cleveland Automobile Co. has been declared effective. The stock exchange has extended the time for deposit of stock from January 21 to February 7. More than 220,000 of the 280,000 Chandler shares and more than 235,000 of the 280,000 Cleveland shares have already been deposited.

Tennant Expands

CHICAGO, Feb. 1.—The Tennant Finance Corp., 2447 South Michigan Ave., has acquired the National Finance Trust, a concern which finances garages for home-owners on time-payments. J. W. Tennant, Detroit manager for the finance corporation has been recalled to Chicago and is now in charge of the new department.

Buys Accessory Stocks

COLUMBUS, O., Feb. 1.—Dewey A. Rosenfield, proprietor of the Rosenfield Accessory Co., at 436 North High St., Columbus, Ohio, has purchased the entire stock of auto accessories from the Frank P. Hall Co., a hardware concern with two branch stores in Columbus. The latter company will cease handling accessories.

Wallerich Re-enters Industry

INDIANAPOLIS, Feb. 1.-Carl H. Wallerich, who a month ago sold Dodge Brothers dealership for Indianapolis, after building up one of the most profitable concerns in the local trade, has bought the Chrysler agency and building of the Conduit Auto Company and has been appointed Chrysler distributor for this territory. A new company called, the Carl H. Wallerich, Inc., has been established and takes over the Chrysler business and the three-story building built a few years ago by the Conduit Auto Company. The business includes retailing for Indianapolis, and a number of Indiana counties for which the new concern will act in a wholesale way.

Arizona Market Expanding

LOS ANGELES, Feb. 1.—The Arizona market, which is served almost entirely by Los Angeles distributors and local factory branches, is becoming an increasingly larger buyer of motor cars, automotive accessories and equipment. Licensed cars in Arizona now number about 75,000, compared with 56,225 on July 1 last, and show a gain of about 50 per cent over the figures of two years ago.

Gain in Service Equipment And Parts Shipments Shown

M. & A. M. A. Reports Accessories Below November Level, However, With Index Figure of 146

l-

al

r-

a-

ıd

S.

v-

n-

or

ne

ſr.

ent

ew

in

ies

er-

in

St.,

tire

ank

rith

The

ac-

H.

odge

olis,

nost

has

ıild-

and

utor

pany

has

the

story

the

iness and

hich

esale

izona

tirely

local

creas-

auto-

ment.

ımber

25 on

out 50

years

AGE

NEW YORK, Feb. 1.—Shipments of replacement parts and service equipment rose in December as against November, but shipments of original equipment and accessories were slightly lower, according to the January business bulletin of the Motor and Accessory Manufacturers' Association. The composite index number for all four divisions was 137 for December, against 140 in November and 188 in October. The base is 100 for January 1925.

The index number for replacement parts stood at 145, compared with 133 in November, while the gain in service equipment was also marked, the December index standing at 110, against 96 in November.

The slight decline registered in original equipment shipments, which brought the index number to 141 against 149 in November, left this section of the business still at an unusually high level for the season, and business being booked in January is an indication of the high rate of motor car production to be expected throughout the first quarter of the year.

The index number for accessories stood at 146 in December, against 158 in November, marking the normal seasonal decline, but still keeping the level far above that of a year ago.

Business of parts, accessory and service equipment jobbers during 1925 ran fully 10 per cent ahead of 1924 in dollars and cents volume, according to reports to the M. & A. M. A., but the tonnage sales were even higher, as price reductions in many lines held down the money increase. Jobbers' December business was better than November except in western Pennsylvania, affected by the coal strike. The gain was due in part to Christmas merchandising.

Show Is Successful

NASHVILLE, Tenn., Feb. 1.-The 1926 Automobile Show which was held at the Hippodrome in Nashville was not only the largest automobile show yet held in the city, but also one of the most successful from a merchandising and sales standpoint, according to jobbers and dealers exhibiting. Accessory, parts and equipment jobbers reported a particularly good business during the week due the large attendance of dealers present from the middle Tennessee territory. In the motor car and truck field there were 19 exhibitors showing twentyfour makes of cars and trucks; in the accessory division there were 13 exhibitors showing accessories, parts, tires and other automotive equipment, most of them Nashville jobbers; in the radio division there were 15 exhibitors, most of them Nashville radio and electrical job-

New Spicer Sales Manager



William Fairhurst, new sales manager of Spicer Manufacturing Co.

Fordson Tractor Exhibit Tours Cities in Mexico

PIEDRAS NEGRAS, Mexico, Feb. 1 .-An invasion of Mexico by Fordson tractors is attracting much attention among the farmers of this country. The movement was started by a demonstration upon a farm near here, participated in by 21 of these tractors. The various uses to which the tractors may be put were shown. Following the display here, the entire exhibit was loaded on a special train furnished for this purpose by the Mexican government, making 20 cars of exhibits, private cars, etc., for the accommodation of the representatives of the company, and departed a few days ago for City of Mexico, stopping at different cities and towns along the route where demonstrations will be made.

This particular exhibit is being sponsored by the Mexican government, making a study of the utility of Fordson tractors as a power unit, adaptable for various uses in the republic.

A large number of Ford representatives as well as of various supply houses were here during the demonstration week and accompanied the special train to City of Mexico.

Safety Contest Planned

WASHINGTON, Feb. 1.—Detials concerning the fifth annual safety contest of the Highway Education Board were announced here this week. The campaign includes an essay contest for pupils in which a total of \$6,500, in prizes will be awarded to pupils and teachers in the elementary schools.

Charlotte Automotive Sales Total \$84,874,572 in '25

Volume More Than Doubles in Two-Year Period Since 1923, Compilation Shows

CHARLOTTE, N. C., Feb. 1.—Sales by the automotive trade of Charlotte amounted to \$84,874,572.90 in 1925 which was by far the greatest total ever attained, according to figures complied by the Charlotte Automotive Trade Association and announced by Miss Frances Hendren, secretary.

The 1925 sales record compared with a total of \$40,367,839.34 for 1923, showing that the volume was more than doubled in the two-year period. The association did not have on record the total for 1924.

The greatest increase was in sales of passenger cars, according to the association's report. The wholesale sales of passenger cars last year totaled \$40,-917,481.58, an amount in excess of the trade's business in all lines in 1923. That total compared with a total of \$17,-094,181.85 for wholesale and retail sales of passenger cars in 1923. Retail sales of cars last year totaled \$4,147,481.60.

Indicative of the growth of another branch here of the automotive trade was the reported increase of \$4,995,814.81 in two years in the wholesale sales of accessories, replacement parts and automotive equipment, the total of 1925 being \$6,490,814.71. Retail sales of these items in 1925 totaled \$1,110,372.83.

Sales of tires, wholesale and retail, amounted to \$10,186,073.33 in 1925, compared with \$6,548,384.24 in 1923, or an increase of 55 per cent in that two-year period. Last year the wholesale sales of tires were \$9,828,009.87 and retail sales were 358,063.46, compared respectively with \$6,130,384.24 and \$418,000 in 1923.

Mackie Joins Flint

FLINT, Mich., Feb. 1.—R. H. Mackie, vice-president and general sales manager of the Flint Motor Company, announces the appointment of W. H. Mackie as sales promotion manager. Mr. Mackie is an experienced advertising man, and will map out a program of extensive sales helps for the Flint selling organization.

Decide Against Dodge

DETROIT, Feb. 1.—John Duval Dodge was granted a one-fifth interest in the real estate of his half-sister, Anna Margaret Dodge, but was denied any share in her personal property by Probate Judge Henry S. Hulbert in a decision handed down here. Anna Margaret Dodge's real estate is assessed at only \$6,384.87, so Mr. Dodge's share will be \$1,276.97, whereas her personal property is declared in the inventory to be worth \$7,552,129.52. Dodge's counsel will appeal to the Circuit Court.

Amendment to Dyer Theft Act Proposed to Congress

Plan Would Make It Easier to Convict When Rented Cars Are Stolen

WASHINGTON, Feb. 1.—Though the national automobile theft act prohibits the transportation in interstate commerce of stolen automobiles, it has been found that the law does not prohibit transportation of cars which have been loaned or rented in good faith and later stolen by the person to whom they were loaned or rented.

In order to remedy this situation representatives of the American Drivurself Association and the Hertz Drivurself System of Chicago, the Saunders System of Kansas City, Mo., the American Automobile Association, and the National Automobile Dealers' Association appeared before a subcommittee of the House judiciary committee to urge an amendment to the present law.

Under the proposed amendment, not only would persons who steal automobiles outright be subjected to federal prosecution but also those who commit larceny after trust and those who embezzle automobiles could be prosecuted.

The proposed change is sponsored by H. C. Bradfield of Chicago who started the original agitation for the enactment of this act, better known as the Dyer bill. The proposed change in the law is understood to have the approval of the Department of Justice and of district attorneys who have tried cases under the national automobile theft act. The amendment will make it much easier to obtain convictions of all classes of persons who transport stolen automobiles in interstate commerce.

Display Well Patronized

NEWARK, N. J., Jan. 30.—The second annual equipment display conducted by the Economy Auto Supply Co., at 268 Halsey Street, is attracting many dealers this week, some of whom have come a distance of 100 miles. Manufacturers' representatives are here demonstrating their products and attendance of customers and prospects is averageing 100 a day.

The 30 lines of equipment being shown include the Airshot lubrication system, the Rottler boring bar, Kellogg rapid car washing machine and the Halee crank pin returning tool, which have been added to this concern's lines recently.

Ford Announces Details of New Canadian Finance Plan

FORD CITY, Ont., Feb. 1.—Establishment of a new time payment plan to be known as the National Time Payment plan has been announced by the Ford Motor Company of Canada, Ltd. Under the new plan payments are the same throughout the Dominion, with prospective purchasers knowing definitely the amount of down and monthly payments before the car is purchased.

According to Wallace R. Campbell, vice-president and general manager, the purchaser pays only the advertised amount and no more. All Ford passenger cars are now obtainable from Ford dealers in conjunction with the Traders Finance Corporation, Ltd.

Following are the down and monthly prices under the new plan:

Runabout, \$175 down and \$35 a month. Touring, \$200 down and \$35 a month. Coupe, \$250 down and \$40 a month. Tudor, \$300 down and \$45 a month. Fordor, \$350 down and \$50 a month.

Defining "Insurance Agent" Is Issue in Chrysler Plan Tilt

Say Decision of Supreme Court Likely Will Hinge Upon Interesting Technical Point

NEW YORK, Feb. 1.—Litigation over the Chrysler-Palmetto insurance plan has been advanced to the calendar of the United States Supreme Court by appeals from Federal Court decisions in Maine and Wisconsin. It is understood that the Supreme Court's decision will depend upon what constitutes an insurance agent and whether the application of state insurance laws against the blanket policy obtained in Michigan is in violation of the fourteenth amendment to the constitution.

The Chrysler plan was upheld in a decision yesterday by Judge Conrad Olson in St. Paul, Minn., in a test case brought by the Minnesota insurance department against a salesman employed by the McGill Motor Co. of St. Paul, Chrysler distributor, for alleged violation of the state insurance laws. Judge Olson held that the facts as presented showed no such violation and, therefore, dismissed the case.

The Minnesota attorney general had argued that a salesman selling an insured car was an insurance agent and must have a license.

The Chrysler plan has also been the subject of litigation in the Federal courts of Ohio and New York.

Plant Adds Facilities

COHOES, N. Y., Jan. 30.—To increase production this year, two new departments will soon be added to the Ford Motor Company's plant at Green Island. The plant has resumed day and night schedules after a two weeks' shutdown.

Flint Dealers Hold Banquet During New York Show



Flint dealers' dinner held at Hotel Roosevelt, New York City the week of the New York National Automobile Show

Safety Is Prime Factor in Steel Making, Experts Say

Use of X-Ray to Find Defects Is Cited at Sectional Meeting of Treaters

BUFFALO, Feb. 1.—Ideas developed for increasing the safety factor in metals entering into the construction of automobiles, air planes, railroad trains, big guns used by the army and navy were discussed and expounded by 400 members of the American Society for Steal Treating, which held its winter sectional meeting at the Hotel Statler here.

One of the most interesting developments of the steel treaing industry, leaders of the society said, is that of the use of the X-ray in determining whether or not a piece of steel designed for a certain purpose has any cavities or other defects that might cause disaster when put to actual use.

e

d

e

d

ıd

n-

he

ts

se

rt-

rd

nd.

ght

1 GE

Such occurrences as the explosion of a battleship's gun in San Diego harbor, which killed 23 gunners, will be impossible in future cannon manufactured, for, steel treaters assert, the X-ray photograph would betray any defect similar to that which it since has been decided was the cause of the disaster.

There are 3,600 members of the association, and they are credited with having developed the steels, through the use of alloys and heat treatment, that have made the light, strong automobile of today possible; with having produced steel rails which no longer break under weather or mechanical strains, and with having manufactured metals strong enough to make airplanes intrinsically safe.

"The art and science of heat-treating steel is advancing in pace with the modern demand for stronger and better metals, and it is the purpose of our meetings to increase our technical efficiency," said W. H. Eisenman, secretary of the association.

Haynes Plan Suggested

KOKOMO, Ind., Jan. 30.—Holders of \$1,000,000 in bonds of the defunct Haynes Automobile Co. will be asked to vote soon on a plan to incorporate the bondholders for the purpose of liquidating the remaining assets of the factory, according to steps outlined by George L. Davis, Kokomo banker and chairman of the bondholders' committee, following a conference with officials of the Fletcher Trust and Savings Bank, of Indianapolis, trustees.

G. M. Promotes Horner

NEW YORK, Jan. 30.—Alfred P. Sloan, Jr., president of General Motors, announces that F. C. Horner of his staff has been appointed assistant to A. H. Swayne, chairman of the corporation's traffic association. Mr. Horner will be in charge of the commercial motor vehicle field on steam and electric railroads.

Motor Car Output in U. S. and Canada

WASHINGTON, Jan. 30.—Following tables show the production of automobiles, both passenger cars and trucks, for 1925, compared with 1924, as announced by the Department of Commerce for the United States and Canada:

Total	Cars	and	Trucks	

	1925	1924
Jan.	241,062	324,567
Feb.	287,213	367,370
Mar.	377,252	393,489
Apr.	439,125	384,353
May	426,016	331,638
June	447,860	254,146
July	*400,364	260,935
Aug.	*259,601	283,879
Sept.	*332,799	295,480
Oct	452,392	293,356
Nov.	*376,353	232,248
Dec.	319,478	209,631
Tot	al4,314,636	3,640,108

The following table shows car and truck production in 1925 in United States and Canada:

		Cars	Trucks
Jan.	2	12,921	28,141
Feb.	9	52,803	34,410
Mar.		32,154	45,098
Apr.	3	91,302	47,823
May		82,714	43,303
June		64.806	38,054
July			*41.810
Aug.	9		*37,770
Sept			*60,374
	4		45,823
Nov.			*39,995
Dec.		85.198	34.270

Total3,817,638 496,99

*Revised.

Greenfield Plans Show

GREENFIELD, Mass., Jan. 30.—The annual show of the Franklin County Automobile Dealers' Association in the State Armory here Feb. 11 and 12 will have more than 50 cars on exhibit by some 25 dealers in different parts of the county. Entertainment features are being arranged and the big drill shed will be decorated elaborately.

Air Development Expected To Parallel Car Industry

WASHINGTON, Feb. 1.—With sympathetic Federal support, the United States will enjoy an era of air transportation paralleling the growth of the automotive industry and the radio art, according to a statement just made here by J. Walter Drake, assistant secretary of commerce in connection with his making public the complete final report on civil aviation of the joint committee of the Department of Commerce and the American Engineering Council.

After canvassing scores of reliable sources of information here and throughout the world, the committee is of the opinion that the promotion of civil aviation in the United States is retarded by four fundamental difficulties: 1. Lack of definite legal status and Government control. 2. Lack of an established Government policy to encourage the civil and industrial uses of aircraft. 3. Lack of commercial aircraft and equipment best adapted to profitable commercial operation. 4. Consequent lack of public and business confidence and support.

Columbus Show Big Success In Spite of Bad Weather

Total of 250 Passenger Cars and Many Trucks and Accessories Are Displayed

COLUMBUS, Feb. 1.—Despite rather unfavorable weather conditions, the twenty-second annual Columbus Automobile show, held in Machinery Hall on the Ohio State Fair Grounds, was a huge success. In all 250 passenger cars were on display and a number of trucks and accessories. Special features were dancing and music, the latter furnished by a nationally known orchestra.

According to those in charge of the various exhibits, sales were good right from the start and in excess of the records of last year. This is attributed partly to the fact that the show was given earlier than usual and also because of the many new models which were displayed. Farmers were attracted to the show in larger number than ever before. Prospects obtained among the agricultural population lead the dealers to believe that trade in rural sections will show quite a healthy increase this year over last year.

Closed cars, as is the case at all shows, were very much in evidence and fully 85 per cent of the models were of that type. Wood wheels continue to be the most popular, judging from the number on display as compared with wire and disc wheels. More dignified colors were shown and the loud colors were almost entirely absent on the models displayed.

In all 60 different models were shown. In trucks there was also quite a number of vehicles displayed. The show was under the auspices of the Columbus Automobile Dealers' Company of which H. M. McCord is president and A. B. Coates, manager.

Maccallum Joins K .- S.

CHICAGO, Jan. 30.—James Maccullum, Jr., has joined the King-Seeley Corporation of Ann Arbor, Mich., manufacturer of the K.-S. Gasoline Telegage, as accessory sales promotion manager. Mr. Maccallum, who formerly was president and general manager of the Gasoscope Co. of St. Louis, will spend some time in Chicago working out a plan of national distribution for the Telegage which will be exhibited at the Chicago automobile show.

Fada Plans New Plant

NEW YORK, Jan. 30.—F. A. D. Andrea, Inc., manufacturer of Fada radio, plans to erect a modern plant, devoted exclusively to the manufacture of radio apparatus, on ground recently purchased on 138th Street in the Bronx. Here will be concentrated the manufacturing activities now being conducted in four factories located at and near the main division of the company at 1581 Jerome Avenue.

Arrangements Are Almost Complete for Toledo Show

Additional Space Is Supplied This Year But Already a Shortage Looms

TOLEDO, Feb. 1.—Preparations for Toledo's eighteenth annual automobile show are being completed and it is already apparent that the event will be more attractive than any ever held here. The show will be held February 8 to 13 in the new Civic Center garage which is in the heart of the downtown district.

Three floors of the garage are to be used giving the show 47,000 square feet of space.

The show is under direction of the Toledo Automotive Trades Association of which T. J. Cooper is manager. Members of the association who have returned from the New York show are enthusiastic over the outlook for the big event here this year. They see in the colors, new models introduced, and many refinements made in the standard lines plenty to make the Toledo show an outstanding success.

There is already some difficulty in providing sufficient truck and accessory space.

Burning of the old Terminal building last summer definitely put it out of use for the show but the new arrangement gives the show considerably more space.

Overland Plans Meeting

INDIANAPOLIS, Jan. 30.—More than 400 Willys-Overland dealers of the central section will attend a special Overland sales convention here to be held during the Indianapolis Automobile Trade Association Show to be staged March 15-20. A large building at the Fair Grounds directly across from the show building has been leased for the special sales convention. John N. Willys, president; A. J. Baker, chief engineer, and L. G. Peed, sales manager will come

from the Toledo headquarters to address the dealers. Following the dinner the entire delegation will visit the show.

Ft. Wayne Plans Show

FORT WAYNE, Ind., Jan. 30.—The Fort Wayne-Northern Indiana automobile show will be held in the new \$1,000,000 Shrine temple here February 16 to 20 inclusive. Instead of being merely a city or county show, the exhibit is planned as the premier for car dealers in northeastern Indiana. Distributors here will have displays with sections devoted to dealers outside the city. A radio show will be one feature of the exhibit, each automobile firm dealing in radio apparatus having complete radio displays. The Fort Wayne Radio Dealers' Association is co-operating with exhibits.

Leaded Gasoline Found to Be Safe for Use in Cars

WASHINGTON, Jan. 30.—A committee appointed to study commercial gasoline containing tetraethyl lead has just reported to Surgeon-General Cumming of the Public Health Service that it is not a hazard to the public health and there is no reason why its sale should be prohibited under proper regulation. The investigation was ordered by the surgeongeneral last May because of the death of five workers at the Bayway, New Jersey, plant of the Standard Oil Company of New Jersey.

The report of the committee was based on a study of 252 individuals exposed in various degrees to the exhaust fumes of the gas. The investigation gave special attention to automobile drivers who were exposed to exhaust gases in a much higher degree than the average automobile owner. It was pointed out that the health hazard in the manufacture and blending of tetraethyl lead was serious and must be subject to precise regulation and care. The committee asked that provision be made for continued study of the problem.

Dealers Are Well Pleased With Baltimore Exhibit

Attendance Records Broken and More Interest in Selecting Cars Is Shown by Public

BALTIMORE, Md., Feb. 1.—The greatest automobile show this city has ever seen opened a week ago at the Fifth Maryland Regiment Armory and was brought to a close last Saturday night. From practically every standpoint the event was far in the lead of any previous show staged in Baltimore. It was the twentieth annual show under the auspices of the Baltimore Automobile Trade Association, Inc.

Dealers were much pleased with the results of the show because in addition to permitting them to get many excellent prospects a number of sales were reported. It also was demonstrated that the public interest is greater than ever. It was quite apparent that a greater percentage of the visitors looked over the displays with the serious idea of making selections.

The immense armory was transformed for the show. It was handsomely decorated, spring being the theme. From all appearances the exhibitors put forth greater efforts to make their displays more attractive and they were successful in this endeavor. New models and the new cars that have made their appearance since the last annual show were the center of much attention. Each of the exhibitors had a corps of salesmen on hand to greet the callers at their booths.

There was a total of 34 car exhibitors, all having large space on the ground floor of the building. The attendance records were broken. Ideal weather conditions and the great interest on the part of the public worked hand in hand in enabling the promoters of the show to set some new high marks.

Annual Dinner of the Moto-Meter Co., Inc., Held Recently in New York City



h: di

Car Sales in Idaho Show 20 Per Cent Gain in 1925

Peak Month for Volume Is April With Late Months Best Ever Recorded in State

BOISE, Ida., Feb. 1.—There were 81,450 automobiles registered in the State of Idaho during the past year, a substantial increase over the previous year.

License taxes collected during 1925 totaled \$81,484.05, a decrease of \$180 under the previous year. This decrease was due to the fact that the legislature passed a relief measure authorizing the reinstatement of non productive mining companies and co-operative irrigation and telephone companies without the payment of an annual tax.

The total sales of automobiles for the year just closed in Idaho, amounted to 12,000 cars, a monthly average of 1000 cars, or a 20 per cent increase over sales for 1924. The peak month in 1925 proved to be April, while in the previous year the peak month was May. Sales did not drop to the usual low points. November and December were the best late months ever recorded in the state. Detailed county statistics show that those who profited by good prices for farm prices invested part of their income in automobiles and still had money to put in the bank.

t.

r

f

d

C-

m

h

7S

s-

nd

p-

ch

S-

eir

rs.

nd

ce

er

he

nd

ow

AGE

Although the general level of prices was lower than in previous years, sufficient additional cars were purchased in Boise, the capital of the state, to bring the total sales volume slightly above the 1924 mark. There has been no previous time when the automobile purchasers' dollar has returned as much value as at present. The wholesale and retail automobile business of Boise during 1925 reached the grand total of more than \$7,000,000. The payroll of the business reached approximately \$1,000,000.

Attendance Records Broken At Cleveland Car Exhibit

CLEVELAND, O., Feb. 1.—The trend of beauty in bodies and in engineering achievements is displayed in the automobiles that were exhibited at the twenty-fifth annual automobile show which opened here January 23 for a week's exposition.

The attendance was the largest on the opening day that ever marked a Cleveland automobile show. One thousand more persons walked through the entrance this year than did a year ago when a new attendance record was set.

Both floors of Public Hall attracted public attention in equal degree. On the lower floor, in addition to passenger cars were shown trucks and buses, with emphasis placed on improvements that have been made in the last year. The display of devices and accessories was unusually large. One section was given over to the display of machinery used in garages and in showing the number

Time Payment for Repairs Abandoned by Milwaukee Car Dealer

MILWAUKEE, Jan. 30.—An interesting experiment carried out by a Milwaukee automobile dealer and repair man has thrown a great deal of light upon the possibility of a part-time payment plan for motor car repair work. The dealer is C. L. Jeunesse, 1819 Center street, and the plan he formulated was based on the idea that modern business methods especially with regard to credit extensions, could be profitably applied to the automobile repair business. Mr. Jeunesse handles the Oldsmobile as local dealer and maintains a fairly large repair department, necessary to render service to his Oldsmobile customers.

About four months ago Mr. Jeunesse conceived, and immediately put into excution, a part payment plan for automobile repairs. Blank forms were devised and complete office machinery for tabulating the plan and its results was installed.

Under the arrangement, a client whose repair bill was in excess of \$20, was given the privelege of paying in cash or making use of a credit extension scheme. Under the latter system, a down payment of between 15 and 30 per cent, but usually about 25 per cent, was exacted immediately. The remainder of the account was divided into a convenient number of monthly payments, usually extending over the shortest period compatible with the financial ability of the customer. For his own protection, Mr. Jeunesse took a lien on the car, guaran-

teeing the payment. In order to protect himself on the interest portion of the deal, a proportionate amount was added to the original bill to take care of this feature.

The customers seemed to like the idea—at first—and a large number of them took advantage of it. Later, however, the customer would realize that with the major portion of his bill unpaid there was a possibility of having the remainder sliced off a bit and no matter how perfect the repair work might have been, complaints would come in. Faced with this fact—that human nature is quite tricky and that men love to take advantage of others if possible, the plan was abandoned after its four months trial.

"The principle of the scheme was fundamentally correct," said Mr. Jeunesse, "and I believe that an exclusive repair shop with a fairly large business could considerably increase its volume by offering term payment for work. Because of my dealer connection and the constant necessity of not offending anyone we were forced to give up the plan, although if we had been 'hardboiled' about it, we could have undoubtedly made a big success of the scheme. But a 'hardboiled' aggressive insistence upon payment as originally agreed and a determination to make no concessions when none were warranted, is not compatible with dealership and we gave up the plan.'

of operations used in making certain repairs to cars that are most common.

Will Distribute Stutz

WASHINGTON, Jan. 30.—C. Royce Hough, one of Washington's pioneer automobile men, announces the formation of the Hough Motor Company as distributor of the new Stutz vertical eight in this territory. The new company takes over the business of the T. V. T. Motors Corporation, former distributor of the Marmon line and will handle exclusively the Stutz in the future.

Kelly Plant Reopens

SPRINGFIELD, O., Jan. 30.-Production of motor buses and commercial trucks has started Monday at the Kelly plant by the American Bus and Truck Co. Gen. C. C. Jamieson, who is chairman of the board of the new Delaware Co., was here the latter part of the week and made preparations to start manufacturing the buses and trucks. The company has obtained the right to manufacture the Tilling-Stevens gas electric bus in this country. For years this bus has been in use in England and Scotland and other parts of Europe. The truck to be made is the Kelly-Springfield heavy duty truck, which was used during the world war by the government.

General Motors Said to Be Preparing to Buy Mathis Co.

PHILADELPHIA, Feb. 1.—General Motors Corp. is reported in cabled advices from Paris to be negotiating for purchase of the Mathis automobile factory in Strasbourg and the sales organization of the factory throughout France. E. E. C. Mathis returned to Strasbourg from the United States a month ago and is now understood to have sailed for New York Jan. 27 in company with a group of General Motors officials.

The Mathis Societe Anonyme is capitalized at 20,000,000 francs. Its product is of the small car type, five models appearing in recent listings, three fours and two sixes. Bore and stroke of the four-cylinder engines are 2% by 3½, 211/16 by 315/16, and 23/4 by 4 in. six-cylinder specifications are: 23/16 by 3½ and 2% by 2¾ in.

The wheelbases of these cars vary from 108 to 122 in., and the treads from 43 to 51 in. Thus all of the cars are of the narrow track type and all carry engines of small displacement. Two of the engines have the valves in the head, while the other three have L head engines.

G. M. Savings Fund to Pay \$11,200,000 to Employes

Disbursement of Cash and Common Stock Will Be Shared by 8,300 Workers

DETROIT, Feb. 1.—Announcement is made by General Motors Corporation that \$11,200,000 in cash and common stock will be given to 8,300 employes. The disbursement is the result of the savings fund established in 1919.

Since 1919 a new class has been formed every year. During the year employes make monthly or semi-monthly payments into the fund not to exceed 10 per cent of their wages, with the total for the year not to exceed \$300. For every dollar put into the fund by the employes, the corporation puts 50 cents into an investment fund in the subsequent five years. Employes have the right to withdraw their deposits from the savings fund plus interest but if they withdraw before the end of five years, they forfeit the money deposited in the investment fund by the corporation.

The actual cash distribution to be made at this time to the 8,300 employes of the 1920 class from the savings fund is \$2,043,405. This is their deposits plus interest at 6 per cent compounded semi-annually. In addition there will be distributed from the investment fund 75,481 shares of General Motors common stock at the market value of \$9,157,720.

The plan makes it possible for any employe participating to borrow money to make payment for a home without losing any of the benefits. Of the 8,300 employes approximately 4,000 are buying homes. At the present time 54 per cent of all eligible employes, or 36,000 are participating in the plan.

C. S. Kegerreis to Conduct Research in Carburetion

TOLEDO, Feb. 1.—C. S. Kegerreis, for seven years connected with the engineering experiment station at Purdue University, has joined the Tillotson Manufacturing Co., to direct the new research department in studying carburetion as it relates to the internal combustion engine.

Mr. Kegerreis is designing and perfecting a chassis in which may be mounted any type of automobile engine for the purpose of making road tests in connection with carburetors, manifolds and other carburetor devices.

The nature of the work to be done in the new research department will include both fundamental research work and applied work to be adapted in the development of the Tillotson products.

New Tire Guaranty

TORONTO, Feb. 1.—Canadian manufacturers of tires on January 1 announced a new tire warranty and the tire manufacturers' division of the Rubber

Maybe It Was Real Tobacco Chew

MARSHALL, Tex., Jan. 30.-Automobiles are great savers for tobacco chewers. Tom Handsen of Panola county testified to that this week after he had sold two bales of cotton here. He lives 30 miles from Marshall and made the trip to town in two hours. "Ten years ago it would have required two days to make the trip," he said. "This morning I made it in two hours. Ten years ago it would have taken a pound of chewing tobacco to make the trip. This morning I made it on one chew. Yep, the automobile is a money saver in more ways than one."

Association of Canada has placed in all Canadian newspapers, weeklies, and magazines large sized copy announcing the change. The former system of adjustment which has been in vogue in recent years in connection with defective tires has been discarded and now a 90-day guaranty is given on pneumatic tires, and 180 days on solid tires. It is claimed by leading tire manufacturers that defects in material and workmanship will show up in road use within these time limits, and in such cases replacements or refunds would be made.

Many Retail Sales Mark Show Held in Milwaukee

MILWAUKEE, Jan. 30.—Predictions that the public would wait until the annual automobile show sponsored by the Milwaukee Automotive Dealers' Association to buy its new cars were fully justified by the sales experience of exhibitors at the show. Distributors displaying practically every line of cars reported heavier sales on the show floor than during any of the 17 preceding automobile shows staged by the association.

So in the midst of an Egyptian decorative scheme, by far the finest ever arranged for a local show, the bright colors of the new cars attracted the most interested attention. A noteworthy fact about the show was that no class of cars was neglected either by the curious or by potential buyers. Increasing attention was obviously paid to cars in the price class from \$600 to \$1,400 or thereabouts and open cars in any price range did not receive a proportionate share of the attention given to closed models.

Sales made at the show bear out almost all of the optimistic prophecies made prior to the first of the year, regarding the prospects for 1926. A strong note of purchasing interest was evident on the part of at least half of the show visitors and the influence of the new models is expected to lead to trading in of older ones by many car owners immediately after show time.

Chicago Tradesmen Endorse N. A. D. A. Finance Program

Urges All Concerns Handling Paper To Maintain "One-Third and Twelve Months" System

CHICAGO, Feb. 1.—Endorsement of the recommendations of the National Automobile Dealers' Association as presented to the National Association of Finance Companies, in regard to the financing of new car sales, has been passed by the Chicago Automobile Trade Association.

Among the recommendations of the N. A. D. A. endorsed by the Chicago Association are the following:

"That all finance companies adhere to the rules of requiring a one-third down payment and completion of the deal within 12 months on new car financing;

"That commercial banks revise their standards of credit to allow greater credit to automobile dealers with fast turning lines of merchandise than to other merchants whose lines move more slowly;

"Absolute elimination of all dealer endorsement of customer paper as a means of removing a legal contingent liability which is not understood by the commercial banker and which shortens the actual credit granted by banks to dealers;

"That where automobile dealer endorsement is required, despite our previous recommendation upon this point, the dealer be allowed to charge a sum sufficient to set up an adequate reserve to cover himself for the risk he is guaranteeing."

Ontario Cars Increased

TORONTO, Feb. 1.—Passenger motor cars in Ontario increased by 32,395 last year, according to figures published here and totaled 303,736. Commercial vehicles numbered 34,690 or an increase of 3,202. The figures do not include motorcycles. Toronto has 56,841 of the passenger cars and 9,030 of the commercial vehicles.

Nash Urges Dealers Extend Free Service When Needed

MILWAUKEE, Feb. 1.—Extension of free service to automobile owners by the dealers of the country was urged by C. W. Nash, president of the Nash and Ajax motor companies, who addressed dealers of Wisconsin and upper Michigan at the Hotel Pfister here. Mr. Nash severely criticized many dealers for being behind the procession in this respect.

"When a customer is entitled to service without charge, give it immediately and gracefully," Mr. Nash said. "Don't make him have to force you."

During the next six months Nash Motors will be unable to supply the demand for the Nash because production is oversold now, by 3,000 cars. New York City alone is asking for 1,800 cars Mr. Nash said, during the month of January, when it is only possible to send them 1,200 during the month.

Michigan Trade Endorses -Perpetual License Plate

m

er

he

0-

ıt-

ce

of

he

he

LS-

to

wn

eal

ıg;

eir

ter

ast

ore

en-

ans

ity

er-

ac-

rs;

en-

re-

int,

um

rve

ar-

otor

last

ere

cles

202.

eles.

ears

led

the

by

and

ssed

ichi-

Vash

be-

pect.

erv-

ately

on't

Mo-

nand

ver-

City

Nash

when

1,200

1 GE

Association Also Recommends That Finance Companies Stick to "Standard" Terms

DETROIT, Feb. 1.—Endorsing the perpetual license plate, and recommending that finance companies require one-third down payment and the remainder in twelve months with the absolute elimination of all dealer endorsement, the Michigan Automotive Trades Association closed its sixth annual meeting here Jan. 27. Upwards of 850 members attended, the largest in the history of the association.

Officers elected for the coming year were George L. Simmons, Flint, president, Frank E. Hathaway, Muskegon, vice-president, L. H. Saunders, Detroit, treasurer. Directors elected for three years follow: Walter J. Bemb, Detroit, Albert L. Benter, Pontiac, M. D. Bryant, Traverse City, A. E. Hubbell, Bay City, Joseph Thompson, Ypsilanti, and Guy A. Butler, Jackson. Mr. Butler, retiring president, automatically becomes a member of the board.

Besides the above resolutions, the association, also went on record as favoring commercial banks to revise their standards of commercial credit to allow greater credit to automobile dealers with fast turning lines of merchandise than to those whose lines move more slowly. It also recommended that where automobile dealer endorsement is required that the dealer be allowed to charge a sum sufficient to set up an adequate reserve to cover himself for the risk he is guaranteeing.

Attendance at the convention was 375, and 811 were present at the banquet. Last year there were 284 at the banquet and 92 at the banquet two years ago.

Ann Arbor won the attendance banner for the 70-mile zone with 38 members at the convention. Jackson was the victor in the 70-120 mile zone with 68 at the meeting.

Rollin to Be Sold

CLEVELAND, Feb. 1.—The Rollin Motor Company, which filed a voluntary bankruptcy petition two months ago, will be sold at auction here February 9, according to announcement by D. L. Johnson, trustee in bankruptcy. Included in the sale will be the parts supply business for the orphan car. Parts are now being supplied from the factory stock, where available, but no new parts are being manufactured. The plant is connected with the Cleveland Tractor Company organization.

Aluminum Alloy Claimed

WASHINGTON, Feb. 1.—Word of the discovery of a method for alloying aluminum with other metals, which will produce materials for automobile bodies which will not show scratches and will

Give Bonus Equal To Year's Pay

JACKSONVILLE, Fla., Feb. 1.-Something decidely unusual in the way of bonus plans has been announced by E. H. Rogers, president of the Consolidated Automotive Co., jobbers of automotive supplies and garage equipment. To each of its employees this company gave a bonus check equal to the entire amount of salary drawn by that employee during the year 1925, which indicates something of the healthy condition of the business in the Florida territory. In a quarter page advertisement published in a Jacksonville newspaper the employees of the company expressed their thanks to the officers of the concern for this liberal bonus, and pledged their united efforts to make 1926 an even greater year for the firm.

have both color and finish "built in" has been received by the automotive division of the commerce department from Berlin. The discovery is claimed by B. Jirotka, a German electrical engineer. The advices state Jirotka has demonstrated his discovery to a commission of metallurgists of the German institute of chemical technology. The bureau for aluminum research reports, according to the advices, that the alloying metals penetrate aluminum bars to a depth of four-tenths of an inch. Aluminum alloys made by Herr Jirotka include those with copper, manganese, cobalt, zinc, lead, chromium, tin, gold, silver and nickel.

N. A. C. C. Hand Book Out

NEW YORK, Feb. 1.—The Twenty-third Annual Hand Book of Automobiles, just issued by the National Automobile Chamber of Commerce, includes illustrated specifications of 178 motor vehicles, covering 770 models, grouped in four sections including 100 private passenger cars, five taxicabs, 15 motor buses and 58 commercial cars and trucks. These represent the current product of manufacture-members of the chamber. All the vehicles shown are gasoline driven except three electric commercial vehicles.

Many Visit Ford Plants

DETROIT, Feb. 1.—Citizens of every country in the world, numbering 158,927 in all, visited the Highland Park plant of the Ford Motor Company during 1925, figures released by the company show. This was approximately 35,000 more than the number which visited the plant in 1924. The River Rouge plant of the company among the largest industrial centers of the world also proved to be a Mecca for visitors. Practically 25,000 are said to have visited this plant during the past year.

General Motors Offers New Line of Heavy Duty Trucks

Model Group Is First Announced Since Merger With Yellow Cab Manufacturing Co.

DETROIT, Feb. 1.—Announcements of a new line of heavy-duty trucks by the General Motors Truck Co., marks the first introduction of new truck models to be made by the consolidated organizations of the truck division of the General Motors Corp. and the Yellow Cab Manufacturing Co. of Chicago which were merged in August last year.

A new and striking design imparted into the frontal appearance of the 3½ and 5 ton chassis has prompted the adoption of the title "Big Brute" as the model designation, while the previous 2½ ton model with certain modifications completes the heavy-duty line.

Both the one ton and 1½ ton chassis introduced last spring are continued without mechanical change or variance in price while on the heavy-duty line however, prices f. o. b. Pontiac have been slightly increased. Within the course of several weeks the line will be supplemented with three truck-tractor models of five, ten and fifteen tons capacity respectively.

In presenting the new-heavy-duty line, the manufacturers lay claim to offering the most completely equipped trucks in their field especially with regard to the maintenance viewpoint of the owner.

White Refines Bus Chassis

CLEVELAND, O., Feb. 1.-A number of improvements and refinements in its special bus chassis, which hereafter will be known as the Model 50-B, supplanting Model 50-A are announced by the White Company. One of the more important changes is the installation of Westinghouse air brakes as standard equipment. Various mechanical refinements have been made in the motor improving flexibility and smoothness of operation. Among other changes, the manifold has been fitted with a hot air stove. The oil system has been revised and improved by increasing the oil pump capacity and the installation of an effective oil strainer.

Clydesdale Plant Sold

NEW YORK, Feb. 1.—The Clydesdale Motor Truck Co. plant at Clyde, Ohio, offered for sale on an order of the Federal District Court, was sold at auction by the Commerce Guardian Trust & Savings Bank, Toledo, receivers, to H. Peltrowitz of the Marine Metal Supply Co., 167 South St., New York. "We are working on reorganization now," said Mr. Peltrowitz, "and expect to complete it soon. Meanwhile, we are operating the plant on a small scale for service and parts, and parts' orders are being filled. We hope to begin manufacturing trucks in two or three weeks."

TRADE ASSOCIATION ACTIVITIES

TIRE DEALERS INSTALL OFFICERS

New President of St. Louis Association Promises to Aid in Co-operation

ST. LOUIS, Feb. 1.—Newly elected officers of the Associated Tire Dealers of St. Louis were installed at a dinner dance at Hotel Chase. They are: Jesse G. Johnston, president; C. V. Quinn, first vice-president; Harry F. Schollmeyer, second vice-president; Joseph Delabar, secretary; A. P. Woehrle (retiring president), treasurer, and Joseph Kuemmerle, sergeant-at-arms. The directors are Arthur A. Guenther, Harry B. White, Louis B. Wyner, Edward A. Colbeck, W. Lew Bowcott, Emil L. Meyer, Jr., and Ernest H. Steinmann.

Johnston in his inaugural address said he would direct his efforts during his term of office toward preserving and strengthening the co-operation among

the tire dealers of St. Louis.

"The tire dealers should enjoy the same close fellowship and co-operation which prevails in the Rubber Association, the organization of tire manufacturers," Johnston said. "The tire business is fourth among American industries, and the public should cherish a corresponding respect for the dealers engaged in this business."

Fleet Maintenance Discussed

NEW YORK, Feb. 1.—Fleet maintenance was the topic at the January meeting of the Automotive Service Association of New York. The principal speaker was Joseph Husson, vice-president of the Eleto Co., which handles deliveries for two of New York's large department stores. It was announced at the meeting that the annual dinner of the association would be held at the Hotel Astor on February 18.

Washington Installs Officers

WASHINGTON, Feb. 1.—Officers were installed by the Washington Automotive Trade Association at its sixth annual banquet in the Willard Hotel here, when nearly 200 persons were present. They follow: Stanley H. Horner, president; Fred L. Haller, first vice-president; J. M. Dugan, second vice-president; L. S. Jullien, treasurer, and E. M. Wallace, secretary. R. J. Murphy was chairman of the committee of entertainment, with L. S. Jullien vice-president. Other members of the committee were D. J. Barry, C. H. Warrington, R. W. Wheat, Noel Rosasco, E. R. Ver Weibe and S. S. Grogan.

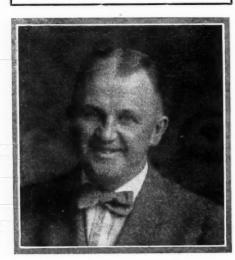
Fort Dodge Dealers Elect

FT. DODGE, IA., Feb. 1.—At the annual meeting held recently by the Ft. Dodge Dealers' Association the following officers were elected: Floyd Rankin, president; V. E. Laurence, vice-president; C. B. Pilcher, secretary, and D. H. Kuhlman, treasurer.

Re-elected Sixteenth Time

DES MOINES, IA., Feb. 1.—Dean Schooler was re-elected president of the Des Moines Automobile Dealers' Association for the sixteenth consecutive time at the annual meeting. William W. Sears was re-elected vice-president, and three directors were re-elected as follows: C. G. Van Vliet, executive secretary; J. A. Peverill and C. L. Herring.

Jacksonville, Ill., Dealers' Leader



John G. Berger, new president, Jacksonville, Ill., Automotive Dealers' Association.

Mr. Van Vliet has served as secretary of the club as long as Mr. Schooler in the presiding chair.

White Heads Buffalo Group

BUFFALO, N. Y., Feb. 1.—Thomas A. White, 499 Richmond avenue, manager of the Wholesale Radio Equipment Company, 108 Pearl street, was elected president of the Buffalo Radio Trades Association. Other officers are: Elmer C. Metzger, vice-president; Emil Sommers, secretary; Meyer Golman, treasurer; H. I. Sackett, Edward C. Beale and Edward P. Ball, directors.

Racine Elects Lawson

RACINE, WIS., Feb. 1.-A. R. Lawson was elected chairman of the board of directors of the Racine Automotive Merchants' Association at the annual meeting. M. Wholahan, Berne Rohan and John Belden were named three-year directors and George Nelson, William Friede and C. C. Pyle were elected directors for five years. The association is solidly behind the annual automobile show to be held in Memorial Hall in this city February 11-14, inclusive. Twenty dealers have pledged themselves to show 100 cars at the exhibit, making it the largest in point of displays of yet held by the organization. publicity and advertising campaign on a much larger scale than any in the past will introduce the show, and general arrangements already made indicate that the entire affair will be carried out on a big scale.

Eugene Service Men Elect

EUGENE, ORE., Feb. 1.—The Independent Service Station Owners' Association has been formed here with Ed Fala of Portland president. Other officers elected were Otto K. Paulus, Salem, first vice-president; Ernest Williams of Ashland, second vice-president; J. A. Witacer of Marshfield, third vice-president, and J. T. Conwell of Portland, secretary-treasurer.

NOVELTY BRINGS BIG ATTENDANCE

D

T

of

tv

tr

C

S]

SE

ca

R

Secretary of Alabama Association Uses Unusual System to Compel Interest

BIRMINGHAM, Feb. 1.—How to persuade automobile men to attend a state or city meeting of a dealers' association is a question which has long agitated the officers of associations everywhere. Accordingly Jim Farley, secretary, tried the plan and he is convinced that it was responsible in part for the very good attendance at the Alabama Automotive Trades Association meeting that was held in Montgomery.

Knowing that three out of four business men do not even read the circulars that come upon them in deluges with the mail every morning, he decided that he would keep them reminded by sending them something that they could take in at a glance and with hardly a pause in the opening of the more important mes-

sages

Accordingly for a month before the annual meeting in Montgomery he sent all of the dealers in Alabama postal cards bearing references to the meetings and urgent requests that they attend. Mr. Farley believed that the continued appearance of the cards would have a very good effect, and his belief seems to have been borne out, for the Alabama Automotive Trades Association at this session experienced the best attendance it has ever had.

Plan Legislative Drive

ATLANTA, Feb. 1.—At the first 1926 meeting of the newly elected board of directors of the Atlanta Automobile Association definite plans were laid for the activities of the association during the extra session of the Georgia State Legislature which is to convene in February in Atlanta, and a legislative committee has been appointed by the president of the organization.

The primary purpose of the extra session of the legislature will be to obtain highway legislation in Georgia and to consider tax matters, and present indications are that a number of matters directly and indirectly affecting the automotive industry in the state are to come up for consideration during the

session.

In addition to opposing tax bills the committee will urge the passage of legislation pertaining to new highway construction, the plan of the legislative body being to appropriate ample money to pave most of the principal highways in the state that Georgia may take rank with its neighboring states in this respect.

Crawford Heads Radiator Body

ST. LOUIS, Feb. 1.—John Crawford of the Crawford Radiator Co. was elected president of the radiator division of the Associated Automobile Service Companies of St. Louis at the annual meeting of the division at Claridge Hotel, Harry W. Jett of Jett & Mautz was elected vice-president and representative of the division on the board of directors of the A. A. S. C., Albert Horn, Horn Auto Radiator Co., was named treasurer and financial secretary, Walter Mack, Mack Radiator Co., recording secretary, and Henry F. Grammann, Radiator Service Co., sergeant-at-arms.

Detroit Silver Anniversary Show Is Highly Successful

CE

ate

ion

the

Ac-

the

vas

boo

ive

vas

ars

the

he

in

in

es-

the

ent

stal

ngs

nd.

ued

to

ma

his

nce

926

of As-

the

ary

tee

of

ain

to

idi-

ters

auto

the

the

eg-

on-

ody to

ank

ted

the

pa-

ing

ted

the

uto

and

ack and

vice

GE

Total of 340 Passenger, 95 Commercial Cars, 5 Motor Boat Makes and 2 Planes Displayed

DETROIT, Feb. 1.—Thirty-nine different makes of passenger cars, four makes of buses, five makes of motor boats, and two airplanes comprised the silver anniversary automobile show held by the Detroit Automobile Dealers' Association at Convention Hall.

Upwards of 200,000 square feet of floor space was needed to house the 340 passenger cars exhibited, the 95 commercial cars, and the 76 automotive equipment booths and the motor boats and airplanes.

The highest priced car was a Rolls-Royce priced at \$17,600 and the lowest a Ford valued at \$260.

No cars were exhibited at the local show that were not shown at the N. A. C. C. show in New York. The John Duval Dodge Rotary Valve Eight which was shown for the first time in New York was exhibited at the local show with a chassis.

New cars such as the Stutz, Rickenbacker Super Sport and Pontiac drew large crowds but reports from every exhibitor was that he had secured enough live prospects to make him feel that the coming year for this territory would be unusually good.

New Service Bulletin

NEW YORK, Feb. 1.—A new type of service bulletin for a business association has been inaugurated by the Merchants' Association of New York. This new bulletin takes the place of the usual type of association publication that depends upon advertising for its support. This bulletin prints only information that is of value to members and each item is printed in typewriter type on a separate sheet of paper which can readily be detached and routed to the persons interested.

Authorities See Big Sale Boost After Chicago Show

DETROIT, Feb. 1.—Reports received from dealers located in various parts of the country by automobile executives show that the buying trend is on the upgrade. During the period of the New York show and for a few days after, buying came to a standstill, the opinion being that prospects were afraid to buy lest prices should take a further drop.

The sales as now reported are slightly in execess of those for the same time last year. The Chicago show is expected to prove a decided help in boosting sales.

With the Chicago show out of the way, and the "business of getting down to work" firmly established, the sales are expected to show additional gains. These gains are expected to be better than for the same period last year.

Nash Declares Stock Dividend

KENOSHA, Wis., Feb. 1.—Stockholders of Nash Motors Co. in annual meeting approved the plan to issue nine shares of new common for each of the 273,000 present common. Directors were reelected.

Rich Joins Marmon Dealer

CHICAGO, Feb. 1.—Lester H. Rich, former retail sales manager for Community Motors, Inc., and previous to that with the Bird-Sykes Co., Paige-Jewett dealer and distributor, has joined the Willard McAllister Co., Marmon dealer, 2349 South Michigan Ave., as sales manager.

Velie Begins Removal of Engine Plant to Moline

MOLINE, Ill., Jan. 30.—Edwin McEwen, general manager of the Velie Motors Corporation, announces that the removal of the machinery and equipment for the manufacture of motors from the plant at Marion, Ind., where this work has heretofore been carried on, to its main plant at Moline, has begun. This work will be carried on just as rapidly as is possible without interrupting in any way the corporation's production of motor cars and it is hoped to have the removal completed some time during the forepart of March.

This removal is part of a general plan which has as its object reductions in the costs of the corporation's product—through the manufacture of parts heretofore purchased outside and partly through the concentration of manufacturing operations within the corporation's main plant at Moline.

The buildings, land and fixed equipment at Marion, have been sold to the Marion Insulated Wire and Rubber Company, whose plant in Marion adjoins that of the Velie Motors Corporation.

Industry Pays \$79,105,818 Taxes in Last Half of 1925

Report of Revenue Bureau Shows Gain of \$18,745,963 Over Same Period of 1924

WASHINGTON, Feb. 1.—A total of \$79,105,818.92 was colleted from the automobile industry in excise taxes for the last six month of last year, compared with \$60,361,855.67, collected during the corresponding period of 1924, representing a gain of \$18,743,963.25 in 1925 compared with last six months of 1924.

The December figures, according to the Internal Revenue report just announced, show the December, 1925, excise taxes from automobiles, motorcycles, and accessories to have been \$12,490,663.56, compared with \$10,762,178.93 in December, 1924—a gain of \$1,728,484.63.

Of the total \$1,186,288.34 was collected from the sale of trucks, compared with \$361,481 collected in December, 1924; automobiles and motorcycles taxes amounted to \$9,384,606.01, in December 1925, compared with \$8,585,993.39 in December 1924, and from parts and accessories, the December, 1925, collection was \$1,919,769.21, compared with \$1,814,703.93 in December, 1924.

Rosenbach Joins Foreman

CHICAGO, Feb. 1.—W. D. Foreman, manufacturer of Triangle Brand axle shafts and piston pins, announces the appointment of David Rosenbach as general sales manager. He was formerly sales manager for Dalton & Balch, Inc., Chicago, field secretary of the Automotive Equipment Association, and for many years sales manager for the manufacturers of the Rayfield carburetor.

Coming Motor Events

Automobile Shows

TIMEOTHOUSE DITORIO	
Providence, R. IFeb.	6-13
MinneapolisFeb.	6-13
Toledo, OFeb.	
Schenectady, N. YFeb.	
Syracuse, N. YFeb.	8-13
Highland, IllFeb.	12-14
Kansas City, MoFeb.	13-20
Des MoinesFeb.	14-20
IndianapolisFeb.	15-20
Louisville, KyFeb.	
Logan, W. VaFeb.	15-20
Peoria, IllFeb.	15-20
Chattanooga, TennFeb.	15-20
Great Falls, MontFeb.	16-20
Hartford, ConnFeb.	20-27
Grand Rapids, MichFeb.	22-27
OmahaFeb.	22-27
St. LouisFeb.	
Mankato, MinnFeb.	

Joh	nstown,	PaFeb.	27-Ma	r. 6
Wil	mington	Del	Mar	. 1-4
Bos	ton	***************************************	.Mar.	6-12
		Tex	Mar.	6-14

Conventions

American Drivurself Association, annual, in Chicago, Feb. 9-10.

Illinois Automotive Trade Association, sixth annual Abraham Lincoln Hotel, Springfield, Ill., March 1-2.

North Carolina Automotive Trade Association, annual, Winston-Salem, N. C., March 17.

Texas Automotive Dealers' Association, Tenth annual, Galvez Hotel, Galveston, Tex., May 12-13.

Foreign Shows

London and Birmingham......Feb. 16-26 (British Industries Fair of 1926).

Coming Feature Issues of Chilton Class Journal Publications

February 18 — Automotive Industries — Statistical Issue.

Prices and Weights of Current Passenger Car Models

						0			,	assenge	1 Can	TATO	Juc	10	
AJA	PASS.	S. BODY STYLE.		CHRY	PASS.	S. BODY STYLE. CR (Continued) (11294 in. W. E	. PRICE	SHIP	P. PASS.	3. BODY STYLE.		SHIP	PASS.	3. BODY STYLE. PR	RICE
3100 3130 3145	0 5-p 0 5-p PERSON 0 5-p 0 5-p 5 4-p	Touring Sedan N "6" Phaeton Sp. Phaeton Coupe	2,050	2805 2785 2895 2935 2995 3060	4-p 5-p 5-p 4-p 5-p 5-p	Roadster Phaeton Coach Coupe Brougham Sedan	\$1,625 1,395 1,445 1,795 1,865 1,695	2900	4-p 5-p 3-p	Roadster Coach Coupe Sedan	\$1,095 1,295 1,195 1,295 1,395	JORD	5-p 5-p 5-p	Sedan	\$1,095 995 1,095
3570 3520 3750 3790	0 5-p 0 5-p 0 4-p	Sp. Sedan "ST. 8" Sp. Phaeton Coupe	2,050 2,100 1,995 2,450 2,595	3085	5-p 5-p (194-p	Imperial Seda Crown Sedan Imperial 120 in. W. B.) Roadster	lan 1,995 n 2,095		4-p 5-p 3-p	Roadster Coach Coupe Sedan	1,295 1,495 1,395 1,495 1,595	3340 3625	5-p 5-p	Playboy Road. \$1 Sedan 1 Series "A" Touring 2 Brougham 2	2,275
*******	5-p 5-p	Roadster Coupe	\$1,145 1,145 1,175	********	5-p 5-p (12 4-p	Phaeton Sedan 127 in. W. B.) Coupe	2,645 3,395 3,195		4-p 7-p	"8-81" Roadster Touring Coupe Road.	2,315 2,265 2,195	3525 3470 KISSE	5-p 7-p EL	Sedan 2, Sedan 2,	2,575 2,675 2,925
2850 2860	4-p 6-p 3-p	Sedan "6-66" Sport-Roadstel Touring Coupe	1,195 er 1,395 1,395	CLEVI 2415 2565	5-p	Sedan Sedan Lim. ND "31" Touring Tour's DeLuy.	3,595 3,695	4050 ESSE	5-p 7-p EX	Coupe Sedan Sedan	2,095 2,265 2,765	3130	2-p 2-p 4-p 4-p 2-p	Sp'dster DeL. 2, Speedster 1, Sp'dster DeL. 2, Enc. Speedster 2	1,795 2,085 1,895 2,185 2,085
3020 3070 3070 3180	5-p 5-p	Brougham Sedan Wanderer "8-88"	1,445 1,495 1,695 1,745	2520 2695 2775	5-p 3-p 5-p	Tour'g DeLuxe Coupe Sedan "43" Touring	xe 1,025 1,035 1,090	2185 2395 FLINT 3325	5-p N T	Touring Coach "80" Sport Road.	\$765 765	3190	4-p 4-p 2-p 4-p 4-p 5-p	Enc. Speedster 2, Enc. Spd. DeL. 2, Enc. Spd. DeL. 2, Tourster 1, Tourster DeL. 1, Phaeton 1	2,185 2,685 2,585 1,795 1,985
3180 3200 3380 3450 3450 3750	6-p 3-p 5-p 5-p	Sport-Roadster Touring Coupe Brougham Sedan Wanderer Sedan	1,695 1,745 1,795 1,995 2,045	2890 2950 3120 3190 3190	3-p 5-p 5-p 5-p 5-p NINGH	Coupe Sp. Touring Sedan Sedan DeLuxe Sport Sedan	1,225 1,295 1,345	3325 3245 3310 3245 3595	4-p 5-p 4-p 5-p 7-p	Sport Road, Touring Sp. Touring Coupe Sedan Sedan	\$1,945 1,595 1,945 2,045 2,195 2,395	3170	5-p 7-p 7-p 4-p 4-p	Phaeton DeL. 1, Touring DeL. 1, Coupe Roadster 1, Coupe DeL. 2,	1,585 1,785 1,685 1,885 1,695 2,085
2845 2955 3020 3150	2-p 5-p 2-p 5-p	"Standard" Roadster Touring Coupe 2 d. Sedan	\$1,125 1,150 1,195 1,195	4600 4500 4700 5000	7-p 4-p 4-p 6-p	"V-6" Touring Sp. Touring Coupe Limousine	\$6,650 6,150 7,600 8,100	2715 2940 2965	4-p 5-p 4-p 5-p 5-p	Roadster Touring Coupe Roadste Sedan 4d. Brougham	1,395 1,285 er 1,495 1,525 1,575	3540 4070 4010 3530	5-p 5-p 5-p 7-p 7-p 5-p	Broug. Sedan 1, Brg. Sed. DeL. 2, Brougham 2d. 1, Sedan De Luxe 3, Ber. Sed. DeL. 3, Victoria 2,	1,995 2,485 1,695 3,085 3,185 2,185
3110 3230 3350	4-p 5-p (12) 2-p	Coupe 4 d. Sedan "Master" 20 in. W. B.) Roadster	1,275 1,295	3750 3800 3700	4-p 4-p 4-p	"6-70" Roadster Sp. Tourer Phaeton	\$3,500 3,500	FORD Withou	5-p 5-p	"Jr. 6" Coach DeL. Coach arter and Dem.	1,085 1,185	*******	5-p 2-p 2-p 4-p	Victoria DeL. 2,4 "75" Speedster 2,1 Speedster DeL. 2,4 Speedster 2,2	2,485 2,195 2,485 2,295
3515 3670 3765 3570	5-p 5-p 5-p (12	Touring 2 d. Sedan Sedan 128 in. W. B.) Sp. Roadster	1,295 1,395 1,495	4200 4200 4500 4700	4-p 5-p 4-p 5-p 7-p	Petite Coupe Petite Sedan De Luxe Coupe Sedan Sedan	3,500 4,500 2,540 pe 4,750 4,700 4,750	1526 1557 1607 1640	2-p 5-p	Runabout With Balloon Ti Touring With Balloon Ti rter and Dem. H	\$260 ires 305 290 ires 335	*******	4-p 2-p 2-p 4-p 4-p 4-p	Speedster DeL, 2,5 Enc. Speedster 2,4 Enc. Spd. DeL. 2,9 Tourster 2,5 Enc. Speedster 2,5 Enc. Spd. DeL, 3,0	585
3635 3805 3855 3940 4025	5-p 4-p 4-p 5-p 7-p	Sp. Touring Country Club Coupe Brough. Sedan Sedan	1,525 1,765 1,795	3200 3150 3500	2-p 4-p 5-p 5-p	"6-60" Roadster Sp. Touring Touring Sedan	1,985 1,985 1,785 2,445	1645 1655 1728 1738 1851	2-p 5-p 2-p	Runabout With Balloon Tin Touring With Balloon Tin	345 ires 305 375 ires 400	*******	4-p 5-p 5-p 7-p 7-p	Tourster DeL. 2,3 Phaeton 1,9 Phaeton DeL. 2,1 Touring 2,0	,385 ,985 ,185 ,085
4040	"314" (132 2-p	' Standard Line 32 in. W. B.) Coupe	\$3,045	2915	4-p 5-p	"92" Roadster Legion. Tour.	e1 405	1860 1961 1972 1994 2004	5-p 5-p	With Balloon Tin Sedan, Tudor With Balloon Tin Sedan, Fordor	ires 545 580 ires 605 660	*******	4-p 4-p 5-p 5-p	Coupe 2,4 Coupe De Luxe 2,8 Broug. Sedan 2,3 Brg. Sed. DeL, 2,9	,485 ,885 ,395
4155 4240 4075 4360 4115	5-p 7-p 5-p 7-p 4-p	Sedan Sedan Brougham Imperial Victoria sustom Built	3,195 3,295 2,995 3,435 3,095	3000 3060 2635	5-p 5-p 5-p 5-p	Legion. Tour, Sedan Imperial Sedan "93" Sedan Touring		FRANI 2800 2845	3-p 5-p	"11-A"	\$2,750		5-p 7-p 7-p 7-p 7-p	Sedan De Luxe 3,4: Berl. Sed. DeL. 3,5: Victoria DeL. 2,8:	,095 ,485 ,585 ,585 ,585
3920 4300 3960	3-p (138 7-p	(132 in.) Roadster 88 in. W. B.) Touring	3,250 3,250	DIANA 2995 3100 3275	5-p 5-p 5-p	Roadster Phaeton Std. Sedan 4d.	\$1,695 1,695 1,995	2965 3175 2900 3080 3275 3135	3-p 5-p 2-p 5-p 7-p 5-p	Sp. Coupe Sport Sedan Limousine Cabriolet	3,090 3,150 3,225 3,275 4,400	2950 3 2950 8 3425 8 3425 8	3-p 5-p 5-p 5-p	"6-50" Roadster \$1,74 Touring 1,75 Sedan 2,15 Landau Sedan 2,24	795 185
3960 4190 4190 4250 4355	5-p 5-p 5-p 7-p 7-p	Phaeton Coupe Sedan Suburban Imperial	3,250 4,000 4,150 4,285 4,485	3160 3170 3640	5-p 5-p 7-p	De Luxe Sedan Cabriolet Sedan De Luxe Sedan (135 in, W. B.)	n 1,995 1,995	GARDN 3150	5-p NER 5-p	Oxford Sedan "6-A" Touring	3,172	3400 5 LINCOL 4460 2 4580 7	5-p LN 2-p 7-p	Roadster \$4,00 Touring 4.00	000 000
3260 3290 3470 3640 3650	3-p 5-p 5-p 5-p	J. I. C. Roadster Touring Sp. Touring Sedan Brougham	\$1,840 1,885 2,160 2,590	2473 2593 2567 2695 2708 2823	2-p 2-p 5-p 5-p 2-p 2-p	Special Roadste Touring Spec. Touring Coupe "B" Spec. Coupe "B"	795 845 845 845 B" 895	3160 3440 3440 3520 3480	4-p 5-p 5-p 5-p	Sp. Readster Brougham Std. Sedan "8-A" Touring Sp. Roadster	1,395 1,545 1,595 1,795 1,795	4740 4 4750 4 4885 4 4760 5 4890 7 4945 7	4-p 4-p 5-p 7-p	Phaeton 4,00 Sport Phaeton 4,90 Coupe 4,80 Sedan 4,80 Sedan 5,10 Limousine 5,30	000 900 600 800 900
3950 4320 CHAN	7-p 7-p NDLER	Touring Sedan	2,590 2,225 2,975	2995 3077 3107 5 DUESE 2	5-p 5-p 5-p ENBER	"B" Sedan Spec. "B" Sed. Spec. "A" Sed. RG traight "8"	895	3580 3730 GRAY	5-p 1 4-p (5-p 8		1,895 2,095 2,095 5	5330 7 5630 5 5464 7	4-p 17-p 15-p 17-p 17-p 17-p 17-p 17-p 17-p 17-p 17	"48" Sportif Tour. 7,46 Touring 7,46 Victoria Sedan 10,05 Brougham 10,04	160 050 040
3090 3085 3233 3309 3525 3498	5-p 5-p 5-p 5-p	Sport Touring Touring Brougham Met. Sedan 20th C'y Sedan	1,645 1,695 1,895 1,590	3970 4 3700 5 3980 4 4115 5	2-p 4-p 5-p 4-p 5-p	Roadster Roadster	\$6,650 † †	HERTZ	Z 5-p 7	"D-1" Touring \$	\$845 5 5 5 \$1,495 3	5640 7 5868 7 5600 7	7-p ? 7-p] 7-p (Touring Lim. 9,50 Enc. Dr. Lim. 10,05 Cabriolet 10,30 "Jr8" Roadster 2,15	500 50 800
1780 1875	7-p S ROLET "Superio 2-p 1 5-p 7	Sedan (\$510 510	†Manu list price	ufactur ces.	"D"	quote	3400 7 3385 5 3425 4	7-p F 5-p C	Super Six" Phaeton \$ Coach	\$1,200 1,165	3250 4- 3400 5- 3350 5-	4-p (5-p 8 5-p 1	Coupe 2,26 Sedan 2,28 Brougham 2,28	65 85 85
2030 2130 2215 	2-p 1 5-p 6 5-p 8 5-p 1 SLER "	Utility Coupe Coach Sedan Landau Sedan "FOUR" in. W. B).	645 645 735 765	3550 5 3800 7 3550 5 DURANT	5-p 7 7-p 7 5-p 7	Touring Touring Touring Sedan	\$2,600 2,600 2,750 3,400	3675 7 HUPMO: 2620 5	7-p S OBILE 5-p T	Brougham 4d. Sedan "A" Touring	1,450 1,650	5- 5- 7-	1-p H 4-p (6-p V 6-p S 6-p S 6-p C	Roadster 5,900 Coupe 6,950 Victoria Sedan 7,300 Sed. (divided) 7,450 Cabriolet 7,500 Limousine 7,500	00 50 00 50 00
2300 2405 2510 2570	2-p F 5-p T 2-p C 5-p C	-	\$890 845 895 935	2380 5- 2450 4- 2480 4- 2650 5-	5-p S 4-p C 4-p S 5-p S	Touring Spec. Touring Coupe Spec. Coupe Sedan Spec. Sedan	805 825 875 880	3135 5 3295 2 3295 4 3410 5	5-p T 2-p C 4-p C 5-p Se	"E-1" Touring Coupe Coupe Sedan	1,385 M 1,945 2,345 37 2,345 2,345 36	6-McFARL 3700 2- 2-3600 5-	-p F -p F -p S -p T	Brougham 7,500 "6" "SV" Roadster \$2,650 Spec. Roadster 2,900 Touring 2,650	50 50 50
60			*						-b D	serime 2			-р Т	Touring 2,750	50

Fet

Prices and Weights of Current Passenger Car Models

SHIP.			
WT. PASS. BODY STYLE. PRICE	SHIP. WT. PASS. BODY STYLE, PRICE	SHIP. WT. PASS, BODY STYLE, PRICE	SHIP.
McFARLAN "6" (Continued) "SV"	OVERLAND (Continued)	REVERE (Continued)	WT. PASS. BODY STYLE. PRICE STEVENS-DURYEA
3850 4-p Coupe 3,180	2205 5-p Sedan De Luxe 695 2202 5-p Std. Sedan 2 d. 595	"M" 3700 2-p Roadster 3,200	5300 2-p Roadster \$8,150 5500 7-p Touring 7,500
3850 5-p Sedan 3,180 5-p Spec. Sedan 3,180	"93" 6	3800 4-p Sportster 3,200 3970 5-p Touring 3,200	5425 4-p Sp. Touring 7,750 5600 4-p Coupe 9,000
3850 7-p Sedan 3,280 5-p Sub. Sedan 3,380	(11234 in. W. B.) 5-p Touring 895	4400 5-p Sedan 4,000	5730 4-p Sedan 10,000 5850 6-p Sedan 9,675
7-p Sub. Sedan 3,480 5-p Brougham 4d, 3,180	2443 5-p Std. Sedan 895 2584 5-p Sedan De Luxe 1,095	RICKENBACKER "E"	5750 6-p Town Brough. 10,175 6100 6-p Vestibule Lim. 9,675
"TV"	PACKARD "6"	(117 in. W. B.)	6210 7-p Vestibule Lim. 10,175 6150 7-p % Limousine 10,175
4000 2-p Roadster 5,400 4600 4-p Sp. Touring 5,600	(126 in. W. B.)	5-p Touring \$1,750 7-p Touring 1,795	6200 7-p Cabriolet 10,175
4900 4-p Coupe 6,720 5200 4-p Tour. Sedan 6,720	3643 4-p Roadster \$2,785 3653 5-p Touring 2,585	4-p Roadster 1,795 5-p Coupe Sedan 1,695 5-p Brougham 1,895	STUDEBAKER Standard Six
5200 7-p Tour. Sedan 6,810 6-p Sedan 6,720	3595 4-p Sp. Touring 2,750 3753 4-p Coupe 2,585	4-p Coupe Roadster 1,920	2760 3-p Du. Roadster \$1,125
7-p Sedan 6,810 7-p Spec, Sedan 6,810	3937 5-p Sedan 2,585 (133 in. W. B.)	7-p Sedan 2,195	2810 3-p Sport Roadster 1,295 2870 5-p Du. Phaeton 1,145 2945 3-p Country Club 1,295
7-p Enc. Sedan 7,110 7-p Sub. Sedan 7,110	3793 7-p Touring 2,785 4043 7-p Sedan 2,785	"B-8" (121½ in. W. B.)	2945 3-p Country Club 1,295 2980 5-p Coach 1,195 3260 5-p Sedan 1,295
5200 7-p Town Car 9,000 "Straight 8"		4-p Roadster 2,195 5-p Touring 2,150	3260 5-p Sedan 1,395
2-p Roadster 2,650	"8"	7-p Touring 2,195 4-p Sup. Sp. Road-	Special Six 3380 3-p Du. Roadster 1,395
4-p Roadster 2,900 5-p Touring 2,650	(136 in. W. B.) 4060 4-p Runabout 3,950	ster 3,250 5-p Coupe Sedan 2,095	3500 4-p Sp. Roadster 1,595 3495 5-p Du. Phaeton 1,445
7-p Touring 2,750 5-p Sedan 3,180	4090 5-p Touring 3,750 4023 4-p Sp. Touring 3,900	5-p Brougham 2,295 4-p Coupe Roadster 2,320	3685 4-p Victoria 1,750 3710 5-p Brougham 1,695
5-p Sub. Sedan 3,380 7-p Sedan 3,280	4242 4-p Coupe 4,650 4528 5-p Sedan 4,750	4-p Coupe De Luxe 2,395 5-p Sedan 2,495	3520 5-p Coach 1,445 3875 5-p Sedan 1,895
7-p Sub. Sedan 3,480 4-p Coupe 3,180	2-p Coupe 5,775 (143 in. W. B.)	7-p Sedan 2,595 4-p Sup. Sp. Sedan 5,000	Big Six (127 in. W. B.)
5-p Coach Broug, 3,180 5-p Town Car 4,600	4199 7-p Touring 3,950	ROAMER	3785 7-p Du. Phaeton 1,775 4030 5-p Coupe 2,045
MARMON	5-p Club Sedan 4,890 4655 7-p Sedan 5,000	"6-50-55" (115 in. W. B.) 5-p Spec. Tourer 1,295	4030 5-p Brougham 4 d. 2,095 4050 7-p Sedan 2,145
"74" . 3695 2-p Roadster \$3,295	4710 7-p Sedan Lim. 5,100 PAIGE	5-p Spec. Sp. Tourer 1,395 2-p Bus. Coupe 1,395	4200 7-p Berline 2,225
3604 5-p Phaeton 3,295 3704 7-p Touring 3,295	"24-26"	5-p Coupe 1,395 5-p Sedan DeLuxe 1,695	(120 in. W. B.) 3320 3-p Du. Roadster 1,495
3799 5-p Broug. Coupe 3,295 3754 4-p Victoria Coupe 3,295	5-p Std. Sedan 1,495	"6-54-E" (118-138 in. W. B.)	3425 4-p Sport Roadster 1,645 3505 5-p Sport Phaeton 1,575
3616 2-p Std. Coupe 3,295 3869 5-p Sedan 3,295	7-p Sedan 1,995	4-p Roadster 2,385 4-p Tourer 1,985	3750 5-p Club Coupe 1,650 3760 5-p Sedan 1,895
3859 5-p Sedan De Luxe 3,775 3999 7-p Sedan 3,370	PEERLESS	4-p Sport 2,285 7-p Tourer 2,285 3-p Cabriolet 2,750	STUTZ
3974 7-p Sedan De Luxe 3,850 3969 5-p Sedan Lim. 3,900	"6-72" (126 in. W. B.)	5-p Sedan 2,950 "4-75-E" (128 in. W. B.)	"A-A" 2-p Speedster \$2,995
3999 7-p Sedan Lim. 3,975	3175 5-p Touring \$1,895	"Custom Built"	4-p Speedster 2,995 5-p Brougham 2,995
MOON Series "A"	3425 5-p Coupe 2,295 3500 5-p Sedan 2,395	2-p Speedster 3,485 3-p Sport 3,285	5-p Sedan 2,995 4-p Vic. Coupe 2,995
2600 5-p Roadster \$1,395 2770 5-p Cab. Roadster 1.545	(133 in. W. B.) 3275 2-p Sp. Roadster 2,195	4-p Tourer 2,985	VELIE 2,995
2770 5-p Cab. Roadster 1,545 2560 5-p Touring 1,195 2850 5-p Coach 1,295	3300 7-p Touring 1,995 3700 7-p Sedan 2,595	"8-88" (138 in. W. B.) 4-p Roadster 2,750	"60" 3030 4-p Sp.Roadster \$1,495
2710 5-p DeL. Sedan 2d. 1,495 2860 5-p Std. Sedan 4d. 1,445	3825 7-p Limousine 2,695 "6-80"	5-p Sport 2,750 5-p Tourer 2,495	3025 5-p Club Phaeton 1,450 3150 3-p Coupe 1,450
2710 5-p DeL. Sedan 4d. 1,595	(116 in. W. B.)	7-p Tourer 2,585 2-p Speedster 2,985	3340 5-p Royal Sedan 1,750 3005 5-p Brougham 1,425
London 3270 5-p Sp. Touring 1,985	3150 5-p Sedan \$1,495 3150 5-p Std. Sedan 1,595	3-p Cabriolet 2,950 5-p Spec Sedan 3,485	De Luxe Sedan 2,150
3290 7-p Touring 1.985	"8-69"	7-p Sedan (136-in, W. B.) 3,285	WILLS SAINTE CLAIRE
	(133½ in. W. B.)		
3590 5-p Petite Sedan 2,540	Roadster \$2,995	5-p Brougham 2,895 ROLLS-ROYCE	"B-68" in. W. B.)
NASH "Special"	Roadster \$2,995 5-p Sedan 3,495 7-p Sedan 3,595	5-p Brougham 2,895	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785
NASH "Special" 2870 2-p Roadster \$1,115 2880 5-p Touring 1,135	Roadster \$2,995 5-p Sedan 3,495	5-p Brougham 2,895 ROLLS-ROYCE Chassis †† †† Manufacturers do not quote	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,835 3635 7-p Sedan 3,900
NASH "Special" 2870 2-p Roadster \$1,115 2880 5-p Touring 1,135 3030 2-p Business Coupe 1,165 3120 5-p Sedan 2d. 1,215	Roadster \$2,995 5-p Sedan 3,495 7-p Sedan 3,595 7-p Berl, Limousine PIERCE-ARROW "33"	ROLLS-ROYCE Chassis †† †† Manufacturers do not quote list prices, STANLEY	"B-68" (127 In. W. B.) 3500 7-p Phaeton \$2.835 3495 4-p Coupe 3.785 3520 5-p Sedan 3.885 3635 7-p Sedan 3.900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085
NASH "Special" 2870 2-p Roadster \$1,115 2880 5-p Touring 1,135 3030 2-p Business Coupe 1,165 3120 5-p Sedan 2d. 1,215 3300 5-p Sedan 4d. 1,445	Roadster \$2,995	ROLLS-ROYCE Chassis †† †† Manufacturers do not quote list prices, STANLEY 3400 5-p Phaeton \$2,500	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,885 3635 7-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900
NASH "Special" 2870 2-p Roadster \$1,115 2880 5-p Touring 1,135 3030 2-p Business Coupe 1,165 3120 5-p Sedan 2d. 1,215 3300 5-p Sedan 4d. 1,445 "Advanced"	Roadster \$2,995		"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,885 3635 7-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Town Car 5,500 "C-68" (Custom Built 127 in. W. B.)
Special 2870	Roadster \$2,995	5-p Brougham 2,895 ROLLS-ROYCE Chassis †† †† Manufacturers do not quote list prices, STANLEY "252" 3400 5-p Phaeton \$2,500 3800 5-p Sedan 3,300 STAR "4"	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,885 3635 7-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Town Car 5,500 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3,300 3500 4-p Cab. Roadster 3,785
NASH "Special" 2870 2-p Roadster \$1,115 2880 5-p Touring 1,135 3030 2-p Business Coupe 1,165 3120 5-p Sedan 2d. 1,215 3300 5-p Sedan 4d. 1,445 "Advanced" (121 in. W. B.)	Roadster \$2,995 3,495	5-p Brougham 2,895 ROLLS-ROYCE Chassis †† †† Manufacturers do not quote list prices, STANLEY "252" 3400 5-p Phaeton \$2,500 3,300 STAR "4" 2-p Roadster 525 5-p Touring 525	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2.885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,885 3635 7-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Town Car 5,500 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3,300 3500 4-p Roadster 3,785 3450 5-p Gray G. Trav. 3,300 3520 5-p Sedan 4,085
Special 2870	Roadster \$2,995	### ROLLS-ROYCE Chassis 11	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Town Car 5,500 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3,785 3450 5-p Gray G. Trav. 3,300 3520 5-p Sedan 4,085 3635 7-p Sedan 4,085 3635 7-p Sedan 4,085
Special 2270	Roadster \$2,995	5-p Brougham 2,895 ROLLS-ROYCE	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,805 3635 7-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Cost Bullt 127 in. W. B.) 3350 4-p Roadster 3,785 3450 4-p Cab. Roadster 3,785 3450 5-p Gray G. Trav. 3,300 3520 5-p Sedan 4,085 3635 7-p Sedan 4,085 3635 7-p Sedan 4,100 3670 5-p Brougham 4,285 "W-6" (127 in. W. B.)
Special 2870	Roadster \$2,995	### Standard ### ### ### ### ### ### ### ### ### #	"B-68" (127 in. W. B.) 3500 7-p Phaeton \$2,885 3495 4-p Coupe 3,785 3520 5-p Sedan 3,900 3570 5-p Brougham 4 d. 3,900 3710 7-p Limousine 4,085 7-p Coupe 3,800 "C-68" (Custom Bullt 127 in. W. B.) 3350 4-p Roadster 3,300 3500 4-p Cab. Roadster 3,300 3500 4-p Cab. Roadster 3,785 3450 5-p Gray G. Trav. 3,300 3520 5-p Sedan 4,085 3550 5-p Brougham 4,100 3570 5-p Brougham 4,100 3570 5-p Brougham 4,100 3570 5-p Limousine 4,285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2,800 3550 5-p Gray G. Trav. 2,800
Special 2870	Roadster \$2,995 3,495 3,495 3,595	Standard "6" Standard "6" Standard "6" Standard "2,895 Standard "6" Standard "2-p Coupster 745 Standard "6" Standard "6" Standard "6" Standard "6" Standard "6" Standard "65 Standard "65 Standard "65 Standard "65 Standard "65 Standard "67 St	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3,900 3570 7-p Limousine 4,985 "Custom Built 127 in. W. B.) 3350 4-p Roadster 3.785 3450 5-p Gray G. Trav. 3,300 3520 5-p Sedan 4,005 3520 5-p Sedan 4,005 3520 5-p Gray G. Trav. 3,300 3710 7-p Limousine 4,285 "W-6" (127 in. W. B.) 3410 4-p Roadster 3.785 3630 5-p Gray G. Trav. 2,800 3550 5-p Gray G. Trav. 2,800
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,495 3,595 3,495 3,595	## Standard ## Standard ## ## ## ## ## ## ## ## ## ## ## ## ##	"B-68" (127 in. W. B.) 3500 7-p Phaeton 3.885 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4,085 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3520 5-p Sedan 4.085 3355 7-p Sedan 4.085 3355 7-p Sedan 4.085 3351 7-p Sedan 4.085 3351 7-p Sedan 4.085 3352 5-p Brougham 4.100 3710 7-p Limousine 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Gray G. Trav. 2.800 3580 4-p Cab. Roadster 2.800 3580 5-p Brougham 3.185 3680 5-p Sedan 3.185 3680 5-p Sedan 3.185
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,495 3,495 3,595 3,495 3,595 3,495 3,595 3,495 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,695 3,595 3,695 3,595 3,695 3,695 3,595 3,695	September Sept	(127 in. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4,085
Special 2870	Roadster \$2,995	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.890 3570 5-p Brougham 4 d. 3.900 3570 7-p Limousine 4.085 "Custom Built 127 in. W. B.) 3500 4-p Roadster 3.300 3500 4-p Roadster 3.785 3450 5-p Sedan 4.085 3520 5-p Sedan 4.085 3635 7-p Sedan 4.085 3635 7-p Sedan 4.085 3635 7-p Sedan 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Brougham 3.185 3535 7-p Sedan 3.285 3630 5-p Brougham 3.185 3680 5-p Sedan 3.285 3630 5-p Sedan 3.285 3630 5-p Sedan 3.285 3630 5-p Sedan 3.285 3630 5-p Sedan 3.285
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,495 3,495 3,595 3,495 3,595 3,495 3,595 3,495 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,595 3,695 3,595 3,695 3,595 3,695 3,695 3,595 3,695	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.886 3635 7-p Sedan 3.900 3670 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "Cestom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3500 4-p Cab. Roadster 3.785 3450 5-p Gray G. Trav. 3.300 3520 5-p Sedan 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3710 7-p Limousine 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 3.385 3535 7-p Sedan 3.185 3536 5-p Gray G. Trav. 2.800 3570 5-p Brougham 3.185 3580 5-p Brougham 3.185 3580 5-p Sedan 3.185 3680 5-p Sedan 3.185 3775 7-p Sedan 3.285 3630 7-p Limousine 3.385 "T-6" (127-in. W. B.)
Special 2870	Roadster \$2,995 3,495 3,495 3,595 3,495 3,595	Standard "6" Stan	"B-68" (127 in. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "C-68" (Custom Bullt 127 in. W. B.) 3350 4-p Roadster 3.785 3450 5-p Gray G. Trav. 3.300 3520 5-p Sedan 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Gray G. Trav. 3.300 3520 5-p Sedan 4.100 3570 5-p Brougham 3.185 3630 5-p Brougham 3.185 3630 5-p Gray G. Trav. 2.800 3550 4-p Cab. Roadster 3.285 3550 5-p Gray G. Trav. 3.300 3550 5-p Gray G. Trav. 3.300 3550 5-p Gray G. Trav. 3.303 3550 5-p Brougham 3.185 3630 5-p Brougham 3.185 3650 4-p Cab. Roadster 3.285 3650 5-p Gray G. Trav. 3.800 3550 4-p Roadster 3.285 3650 5-p Gray G. Trav. 3.850 3650 3-p Sedan 3.650 3.650 3.750 4-p Roadster 3.000 3.650 3.650 3.750 4-p Cab. Roadster 3.650 3.650 3.750 4-p Sedan 3.650 3.750 4-p Sedan 3.650 3.750 4-p Sedan 3.650 3.750 5-p Sedan 3.750
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.890 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.890 3570 5-p Brougham 4 d. 3.900 3570 7-p Limousine 4.085 "Web" "Web"
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	Section Sect	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085
Special 2870 2-p Roadster \$1,115 2830 5-p Touring 1,135 3030 2-p Business Coupe 1,165 3120 5-p Sedan 2d. 1,215 320 5-p Sedan 4d. 1,445 **Advanced** (121 in. W. B.) 3220 3-p Roadster 1,375 3400 5-p Sedan 2d. 1,425 **Advanced** (127 in. W. B.) 3480 7-p Touring 1,425 **Advanced** (127 in. W. B.) 3480 7-p Fouring 1,490 3550 5-p Coupe 4 d. 1,990 3550 5-p Coupe 4 d. 1,990 3640 4-p Victoria 1,790 3750 5-p Coupe 4 d. 1,990 3650 7-p Sedan 2,090 **OAKLAND** **G** **OAKLAND** **G** **OAKLAND** **G** **OAKLAND** **G** **OAKLAND** **OAKL	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	Standard "6" Stan	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.895 3635 7-p Sedan 4.885 3636 7-p Drown Car 5.500 "C-68" (Custom Bullt 127 in. W. B.) 3500 4-p Roadster 3.300 3500 4-p Roadster 3.785 3450 5-p Gray G. Trav. 3.300 3520 5-p Sedan 4.100 3570 5-p Brougham 4.0.85 7-p Sedan 4.085 3635 7-p Sedan 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 3.750 3580 4-p Cab. Roadster 3.285 3635 7-p Sedan 4.100 3570 5-p Brougham 3.185 3635 7-p Sedan 3.185 3776 7-p Sedan 3.185 3630 5-p Brougham 3.385 3776 7-p Sedan 3.185 3680 5-p Sedan 3.185 3775 7-p Limousine 3.385 3776 7-p Limousine 3.385 3776 7-p Sedan 3.185 3775 7-p Sedan 3.185 3776 7-p Limousine 3.385 3750 4-p Cab. Roadster 3.285 3835 7-p Limousine 3.385 3750 4-p Roadster 3.000 3500 4-p Roadster 3.000 3500 4-p Roadster 3.000 3500 4-p Roadster 3.650 3750 4-p Cab. Roadster 3.650 3750 4-p Cab. Roadster 3.650 370 5-p Brougham 3.750 3810 5-p Sedan 3.750 3810 5-p Sedan 3.750 3810 5-p Sedan 3.750 3820 5-p Brougham 3.750
NASH	Roadster \$2,995 3,495 3,495 3,495 3,495 3,595 3,495 3,595	Standard "6" Stan	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3500 4-p Roadster 3.785 3520 5-p Sedan 4.100 3570 5-p Brougham 4.0.83 3520 5-p Gray G. Trav. 3.300 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 3.750 3710 7-p Limousine 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Gray G. Trav. 3.303 3550 5-p Brougham 3.185 3550 5-p Brougham 3.185 3550 5-p Gray G. Trav. 2.800 3550 5-p Gray G. Trav. 3.303 3550 5-p Brougham 3.185 3550 5-p Gray G. Trav. 3.385 "T-6" (127 in. W. B.) 3500 5-p Brougham 3.185 3680 5-p Brougham 3.185 3680 5-p Brougham 3.185 3680 5-p Brougham 3.285 3680 5-p Brougham 3.185 3775 7-p Limousine 3.385 "T-6" (127-in. W. B.) 3500 5-p Brougham 3.750 3500 5-p Sedan 3.750 3500 5-p Sedan 3.750 3500 5-p Sedan 3.750 3500 5-p Sedan 3.750 3700 5-p Sedan 3.750 3810 5-p Spec. Sedan 3.750 3810 5-p Spec. Sedan 3.750 3820 5-p Brougham 3.750
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3500 4-p Cab. Roadster 3.785 3520 5-p Sedan 4.100 3570 5-p Brougham 4.085 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 3.750 3580 4-p Roadster 2.800 3550 5-p Brougham 3.185 3550 4-p Roadster 3.885 3630 5-p Brougham 3.185 3775 7-p Limousine 3.385 3855 7-p Limousine 3.385 3855 5-p Brougham 3.750 3800 5-p Brougham 3.750 3900 5-p Bedan 3.750 3900 5-p Brougham 3.750 3900 5-p Sedan 3.750
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.890 3670 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "C-68" (Custom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3500 4-p Cab. Roadster 3.785 3450 5-p Sedan 4.085 3750 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Brougham 3.185 3635 7-p Sedan 3.185 3635 7-p Sedan 3.185 3750 5-p Brougham 3.185 3635 7-p Sedan 3.185 3635 7-p Sedan 3.185 3636 5-p Gray G. Trav. 3.00 3550 5-p Gray G. Trav. 3.00 3550 5-p Brougham 3.185 3680 5-p Sedan 3.185 3680 5-p Sedan 3.185 3775 7-p Sedan 3.285 3630 5-p Brougham 3.285 3630 5-p Brougham 3.185 3775 7-p Limousine 3.385 3775 7-p Limousine 3.385 3750 5-p Brougham 3.750 3850 5-p Sedan 3.750 3850 5-p Sedan 3.750 3750 4-p Cab. Roadster 3.000 3500 4-p Roadster 3.000 3500 4-p Roadster 3.000 3500 4-p Roadster 3.750 3920 5-p Brougham 3.750 3920 5-p Sedan 3.750 3920 5-p Sedan 3.750 3920 5-p Sedan 3.750 3920 5-p Sedan 3.750 3920 5-p Brougham 3.750 3552 5-p Touring 1.750 3564 4-p Coupe 9.195
Special 2870	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 in. W. B.) 3500 7-p Phaeton 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085
NASH	Roadster \$2,995 3,495 3,495 3,495 3,595 3,495 3,595	September Sept	"B-68" (127 In. W. B.) 3500 7-p Phaeton 3.785 3495 4-p Coupe 3.785 3520 5-p Sedan 3.900 3570 5-p Brougham 4 d. 3.900 3710 7-p Limousine 4.085 "Cestom Built 127 in. W. B.) 3350 4-p Roadster 3.300 3500 4-p Roadster 3.785 3450 5-p Sedan 4.085 3520 5-p Sedan 4.085 3635 7-p Sedan 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 4.100 3570 5-p Brougham 3.785 3635 7-p Sedan 4.285 "W-6" (127 in. W. B.) 3410 4-p Roadster 2.800 3550 5-p Gray G. Trav. 2.800 3550 5-p Brougham 3.185 3630 5-p Brougham 3.850 3680 5-p Sedan 3.185 3775 7-p Sedan 3.285 3835 7-p Limousine 3.385 "T-6" (127-in. W. B.) 3500 5-p Brougham 3.750 3900 5-p Brougham 3.750 3910 5-p Brougham 3.750 3920 5-p Brougham 3.750

ICE

1,795 2,085 2,185 2,185 2,185 2,185 2,185 2,185 1,785 1,785 1,785 1,695 1,695 1,685

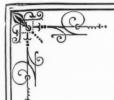
5,500 5,900 6,950 7,300 7,450 7,500 7,500

AGE

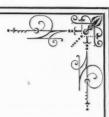
Mechanical Specifications of Current Passenger Car Models

	ABBREVIATIONS— NAMES OF MERS, OF STOCK PARTS	Ark—Atwater-Kent A-L—Auto-Life Ada—Adamis And—Adamis Ans—Alemie Ans—Ansied B&B—Borg & Beek BB—Borg & Beek BB—Ball & Ball Ba—Bassie cups Ba—Bassie cups Car—Carter CAS—CAS Products CIC—Cleveland CIC—Cleveland CIC—Cleveland Cic—Cleveland Cic—Climax	Conn—Connection Coln—Columbia Col—Columbia Col—Columbia Col—Campbell Dolar Dawson Extendible Filler Filler	Gircitis the control of the control	II. Nor—North Rass Nor—North Rass 1. Ray—Rayfield 23. Re—Rockford 25. Se—Saalishury 11. Sat—Sahishury 11. Sat—School 24. Ste—Speedal Make 25. Spe—Speedal Make 26. Ste—Speedal Make 26. Ste—Speedal Make 27. Ste—Speedal Make 28. Ste—Speedal Make 28. Ste—Speedal Make 28. Ste—Speedal Make 28. Ste—Speedal Make 28. Ste—Speedal Make 29. Ste—Speedal Make 29. Ste—Speedal Make 29. Ste—Speedal Make 20. Spe—Speedal Make 20. Speedal Make 20. Spee	Tile—Thiemer Tile—Thiemer Tim—Timken Uni—Timken Uni—Timken Uni—Timken Wa.G—Warner Gear Wa.E—Warner Wa.E—Warner Wa.E—Warner Wis—Warner Wis—Wishinys-Morrow Wis—Wishinys-Morrow Wis—Wishinys-Morrow Zen—Zenk Zen—Zenk
_u	Chassis Lubricatio Type and Make	Pr-Al. Pr-Ze. Pr-Ze. Pr-Ze. Pr-Ze. Pr-Dot Pr-Dot Pr-Ze. Pr	Pr-Ze. Cm.Bo Cm.Bo Cm.Bo Cm.Bo Cm.Bo Cm.Bo Cm.Bo Cm.Bo Cm.Bo Pr-Al. Cocci Pr-Al. Pr-Ze. Pr-Ze. Pr-Ze.	PP-A-A-PP-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A	PP	mshc.
pus ad	Rear Springs—TyT—sagnings—thgns.l	28.50% 1.488.250% 1.488.257 2.4478 2.557 2.559%	\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2 0-30.	8.50 8.50 8.50 8.50 8.50 8.50 8.50 8.50	ate (lubric ear (cai al make ard o-syphere er s
ala	M-nas D garinssl Z	Ross Ross Ross Ross Jac Jac Own	Ross	Cown Ross Ross Ross Cown Ross Ross Cown Cown Ross Cown	Ross. Ross. Gem. Gem. Gem. Ross. Ross. Ross. Ross. Ross. Ross.	Separ plash pur g pur g Standi head Fherm ntilev Varie
BRAKES	Foot—Type and Location Hand—Type and Location 4-Wheel Type 4-Wheel Type	4.77B-F. E-T. M. 5.10B-F. E-T. M. 5.10B-F. E-T. M. 6.10B-F. E-T. M. 4.00B-F. E-T. M. 4.00B-F. E-T. M. 4.45E-F. E-T. M. 4.45E-	4.50 F.P. B.T. H. 4.50 F.P. T. H. 4.50 F.P. T. H. 4.50 F.P. T. T. M. 4.50 F.P. T. M. 4.50 F.P. T. H. 4.50 F.P. T. H. 4.50 F.P. E.T. H. 4.5	B-RI-R. B-RR-T. H B-F. B-T. H B-B. F. B. T. H F. B-T. H B-B. T. H B-T. B-T. H B-T. B-T. H B-T. B-T. H B-T. B-T. H B-T. B-T. N B-T. B-T. N B-T. B-T. N B-T. B-T. N B-T. B-T. N		
XLE	Gear Ratio	25.10 BB	444444669 900 900 900 900 900 900 900	23.00 2.10 2.10 2.10 2.10 2.10	4.89 4.45 4.90 4.90 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5	aft an ngs ngs t, cor t, cor amshaf
REAR AXLE	Type and Make	27777777777777777777777777777777777777	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Market Ma	Z ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	cranksha od bearin o all bea and co
bns	Universals—Type	f The m-Stl. m-Mec. m-Uni. m-Uni. m-Uni. m-Own. m-Spi. f-Sne. f-Sne. f-Own.	m-Uni. F-Own. F-Own. F-Pic. F-Sine. F-	m-Spi. m-Mec. m-Mec. m-Spi. m-Spi. m-Spi. m-Spi. m-Spi. m-Spi. m-Cwn.	m.Spin. m.Spin. m.Spin. m.Spin. m.Spin. m.Mee. m.Mee. M	PC—Pressure to all crankshaft and connecting rod bearings PF—Full pressure to all bearings PK—Pressure to crankshaft, connecting rods and camebaft bearings PS—Splash with pressure Pump Q—Quarter elliptic R—Roctfiffer S—Servo elliptic
	Gear Set-Make	Own Mec W-G W-G Own Own Own Own	Det. Own Own Own Own Own W-G W-G War Own	Own. W-G W-G Own. Own. Own. Own.	Own. W.G. W.G. W.G. W.G. Own.	Pressure t connect Pressure Pressure Pressure Pressure Pressure Precing Paring Pressure Precing Pressure Pressu
	Clutch—Type and	P. B&B. P. Roc. P. Roc. P. B&B. P. Long. D. Own. D. Own. D. Own. D. Own. P. B&B.	P.Own. P. Roc. P. Roc. P. B&B. P. B&B. D.Own. P. B&B. D.B.L. P. B&B. P. B&B. P. D.Own. P. Own. D. Long.	P. Own. P. B&B. P. B&B. D. Long. D. Own. P. Own. P. Own. P. Own. P. B&B. P. B&B.	D.Long. P.B&B. P.Long. P.Long. P.Det P.Long. P.Long. P.Long. P.Long. P.Long. P.Long. P.Long. P.B&B. P.Bom.	
ELECTRICAL SYSTEM	Generator and Starter Make	A-L Remy. Remy. Remy. Remy. Delco. Delco. Delco. Delco. Delco. Delco. Remy.	Remy Remy Remy Bosch Bosch Delco Del	A-L Remy. Remy. Bosch. A-L A-L Own. DeJo. Cown.	Delco. A-L. A-L. A-L. Bosch. Bosch. Bosch. Remy. Remy. Remy. Remy. Remy. Remy. Remy. Remy. Remy.	pee que
ELEC	Ignition System Make	A-L Remy. Remy. Remy. Delco. Delco. Delco. Delco. Delco. Delco. Besch.	Remy. Remy. Remy. Bosch. Delco. Bosch.	A-L Remy Remy Remy A-L A-L DeJo Dyn Remy.	Delco. Bosch. A-L. A-L. Delco. Remy. Bosch. Bosch. Bosch. Bosch. Bosch. Delco. Delco. Delco.	L—L head m—Metal M—Mechanical N.—None N.—Sune O—Optional (brakes) O—Special type (rear springs) OG—Oil and Grease Cups OG—Oil and Grease Cups P—Single plate Pr—Pressure gun
	Air Cleaner?	KZZZZKKZZZZZ	ZZZKZKZZZKZK	ZZZZZ HHZHZZZ	KZ KZKKKZZZZZ	rakes) rakes) (rear si (rear) (rear) (rear) (rear) (rear)
	Carburetor	Car Sch Maar Sch Sch Sch Sch Car	Str. Till. Till. Sch. Sch. Sch.	Til Swan Swan Swan Ste Str Str Sch	Zen Syste Syste Skr Skr Skr Skr Skr Skr Skr Skr	nical nical type type ups nd Gr plate
	Thermostat?	ZZZZZZZXXXZZ	HZHZZHZZZZZHZ	ZZZZZ ZZZZZZ	** ***********************************	head Metal Mecha Metal Mecha Mecha Mecha Mecha Matfor Mecha
	Cooling System	Pre- Pre- Pre- Pre- Pre- Pre- Pre- Pre-	Para Para Para Para Para Para Para Para	Tr.	na sananananan an	
	Oiling System	AFOCOCOCOCO NXXXXXFFXXXX	OKOCIOCOCO COCO COCO COCO COCO COCO COCO	NXXXX SANXXXX	NANNEN PANE FE	
	No. Main Bear.	た455454646446 よ4564446 よるよるよるよる。		ಜರಾ ಈ ರಾಜ ಈ ೧ ८ ೮ ೧ ಈ ರಾಜ ಈ ರಾಜ ಈ ರಾಜ್ಯ ಈ ರಾಜ ಜ್ಞಾನ್ ಈ ರಾಜ್ಯ	4440460606060 CC CONTRACTOR	
	Piston Material		CARCCCCCCI	COCACOPECT.	CO CALL	G—Head and side Gr—Grease cups H—Horizontal (valves) H—Hydraulie (brakes) H—Helical gear Int—Integral Integral
INE	Crankcase In- teg. or Sep.	I RESERVED TO THE PROPERTY OF	Entring Septiment	ESSEPTITE STATE OF THE STATE OF	See the control of th	1 sid cups cups c (by gear gear 1 for
ENGINE	Camshaft Drive		6.8.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.	##4444444 ##44444	4444444444 H4	d and ease lizonthical lical tegra
	Valve Arrange- finem				コンシントントレー アン	Head and side F-Grease cups Horizontal (va Horizontal agent In head F-Integral F-Internal roar Three-quarter e Cone
	Piston Dis- placement	204 206 206 206 224 274 274 289 289 289 171	288 186 218 219 224 230 240 240 240 240 250 260 260 268	200 206 206 299 145 169 230 230 224 177 199 224 276 169	2888 2888 2688 2689 247 247 258 2068 2088 2088 2088 2088 2088 2088 208	PRHRTEZZTA
	Rated H.P.	24222388888282828 64800884427848	2012 22 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25	242882188821888218 00488218828383821 00488218828383821	2222222 2222222222 2222222222 22222222	
	Number of Cyls., Bore and Stroke	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	1. 63.355 1. 63.354 1. 63.24 1. 6	Own C 4-37,8x41,4 Lyc S 6-37,8x41,4 Lyc S 6-37,8x41,4 Lyc B 8-37,4x43,4 Com B 9-6 6-28,4x43,4 Com B 6-28,4x43,4 Com B 6-28,4x43,6 Com B 6-38,4x43,6 Own 11 4 53,4x4,6 Lyc 28 8-33,4x43,4 Own R 8-33,4x4,6 Own R 8-33,4x4,6 Own R 8-33,4x4,6 Own R 8-33,4x4,6 Own R 8-33,4x4,6 Own R 8-33,4x4,6	80 (6.3) \$2.44 (6.3) \$2.45 (6.3) \$2.45 (6.3) \$2.45 (6.4) \$2.45 (6.	CI—Cast from grazine Cu—Cil and grazine Cu—Oil and grass cups D—Multiple disk E-Full elliptic E-Full elliptic E-R-External rear wheels E-T-External rear wheels F-T-External rear FI-Fabric F-Fabric F-Fabric F-Fabric
	Make and Model	Own	Own	Own Lyc Lyc Lyc Lyc Lyc Lyc Com Sp. Con Own Lyc Lyc Own Lyc Lyc Own	Con. 18U 6 Own. A 6 Own. A 7 Own. E-18 Con. Spec. 8 Con. Spec. 8 Con. Spec. 8 Con. Spec. 8 Con. Lat. 8 Own. Jr. 88 Own. 48 Own. 48 Own. 48	t from man and gre and gre and gre diptic disk elliptic Xxternal Xxternal Xxternal xxternal xternal from the gre and green and
1	Tire Size Decimals-Balloons	2666766677 2000027757575757575757575757575757575757	32x6.20 30x5.25 30x5.25 30x5.77 30x5.77 30x6.75 33x6.75 33x6.77 20x4.95 32x6.00 33x5.77 33x6.77 33x6.77 33x6.77	30x5.25 30x5.25 30x5.25 32x6.00 30x4.95 30x5.77 32x6.20 31x5.25 31x5.25 31x5.26 32x6.00	30x5.77 33x6.00 33x6.00 33x6.00 32x4.75 32x6.00 33x6.00 33x5.77 33x5.77 33x6.75	CI — Cas Cu — Cas Cu — Oil Cu — Oil D — Mult E — Full E — Full F — Filter F — Full F — Full
	Wheel Base (Inches)	108 300 300 300 300 300 300 300 300 300 3	120-127 121-1184 1124-1184 118 / 2 130-142 138 138 115 109 125 / 2 126 / 2 121 / 3 124 - 141	$\begin{array}{c} 109 \\ 116 \\ 126 \\ 127 \\$	114% 127% 114% 116% 126-137 126-137 119 1142 1142	80 80 E
	MAKE AND MODEL	St. Awa 4-6-6-6-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-	Chrysler Imperial 20-127 Chrysler 47 109 Chrysler 47 109 Chrysler 67 67 67 67 67 67 67 6	Durant A-22 Elear 4-55 Elear 6-65 Elear 8-81 Essex 8-81 Essex 8-81 Flint 1r 6 Flint 80 Flint 80 Flint 80 Franklin 11 A Franklin 11 A Gardner 8-A Gardner 8-A	Super 6 Super 6 New Day New Day Series A Series A 6 6 6 10 10 10 10 10 10 10 1	TO SYMBO a cost a cost s at extra co loating quarter float inum teel teel h internal four wheels

(Continued on page 64)







MOON-DIANA

Announce

Startling New Prices

Because 1925 was the greatest year Moon Motors has ever had —Because Moon-Diana Sales showed more than a 36 per cent increase over the previous year—Because an increased demand calls for a 41 per cent increase in Moon-Diana production scheduled for 1926—These are the chief reasons for announcing the following new and startling prices effective January 12th, 1926.

New Low Prices For Moon Six			New Low Prices For Diana Eight				
	Roadster	\$1395	Phaeton	\$1695			
	4-Door Standard Sedan	\$1445	Cabriolet Roadster	\$1995			
	Cabriolet Roadster	\$1545	2-Door Brougham	\$1795			
	De Luxe Sedan	\$1595	4-Door Sedan De Luxe	\$1995			
	F.O.B. Factories	;	F.O.B. Factories	3			

MOON MOTOR CAR COMPANY DIANA MOTORS COMPANY

Stewart MacDonald, President.

St. Louis



It's a great thing to be connected with a successful company



Zen-Zenith
(Continued on pag

X—Sleeve valv

d R—Rectifier S—Semi-elliptic Se—Servo

OV-Oil cups with wick I P-Single plate
Pr-Pressure gun

I-R—Internal rear wheels
J—Three-quarter elliptic
K—Cone

nd f—Fabric F—Filter FI—Full floating

B-F.—Both internal an external, four wheels Ch.—Chain

GE

Mechanical Specifications of Current Passenger Car Models—Continued (From This list comprises cars distributed on a national basis) (2)

	ABBREVIATIONS— NAMES OF MFRS. OF STOCK PARTS	WWW. W.	Ze-Zerk Zen-Zenith
	Chassis Lubricatio	BB 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	odels
pue ad	Rear Springs-Tyl Length	R. Ross. S.534, Com-Boston Ross. S.534, Com-Boston Ross. S.544, Pr-Dot Rev. No. 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	п elosed m
ake	M-189D gninsot	Own	o suoo
ES	4 Wheel Type (lanoil)	THE PROPERTY OF THE HEALTH A METERIAL AND NOTES AND NOTE	-Ball
BRAKES	Hand—Type		'n
	Foot-Type and	Var. E-R 3.5.11E-F 4.80 E-R 4.90 B-F 4.	
REAR AXLE	Gear Ratio	7. We will be seen to see a search of the see and see at the see a	
REAF	Type and Make	Committee of the commit	
DIIR	Make	m-Spi m-Sp	
	Universals—Type	m-Spi. m-Spi. f-Sae. m-Uni. f-Sae. m-Uni. m-Own. m-Own. m-Own. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Spi. m-Mec. m-Mec.	te
	Geat Set-Make	W.G. W.G. W.G. W.G. W.G. W.G. W.G. W.G.	Separa
Make	Clutch—Type and	D.Own. Own. wSpi. 3, Own. Var. E. B.	3 0
		A AAAAAAAAAAAAA AA AAAAAAA a'Aa aaaaaaa za a aaaa a'aa aaaa a'aa	
ELECTRICAL SYSTEM	Generator and Starter Make	Y Pu. N Sch. N Delco Delco N Pu. N Till. N Al. Al. Al. N Pu. N Sch. N Delco Delco N Pu. N Till. N Al. Al. N Pu. N Sch. N Delco Delco N Pu. N Sch. N Sch. N Delco Delco N Pu. N Sch. N S	
ELEC	Ignition System	Delco. A-K. A-L. A-L. A-L. A-L. A-L. A-L. A-L. A-L	
	Air Cleaner?	the see of	4
	Carburetor Make	Sch	be sed
	Thermostat?	THE COLUMN AND AND AND AND AND AND AND AND AND AN	il cu
	Cooling System	고 도 교 교 교 교 교 교 교 교 교 교 교 교 교 교 교 교 교 교	0-0
	Oil Cleaner?	NAN NAS & BENNO O WE SOCO SOCO SOCO WE SOCOOLS AS SOCIETY AS SOCIE	.0
	No. Main Bear.	# ####################################	
	Piston Material	Kay kees	
ENGINE	Crankcase In- teg. or Sep.	Sep All Int. Chart refer and the control of the con	
回	Camshaft Drive	Control Cont	
	Valve Attange-	340 240 240 240 240 240 240 240	
	Rated H.P. N.A.C.C.	33. 8. 3. 40 32. 6. 3. 28 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 40 33. 7. 3. 3. 3. 40 33. 7. 3. 3. 3. 40 33. 7. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	:
	Number of Cyls., Bore and Stroke	Own. 74 6-33,x55/38 Uyis. Y 6-33,x55/38 Uyis. Y 6-33,x55/38 Own. 231 6-31,x54/38 Own. 231 6-31,x54/38 Own. 231 6-31,x54/38 Own. 30 6-23,x44/38 Own. 30 6-33,x45/38 Own. 40-50 6-41,x45/38 Own. B 8-33,x45/38 Own. B	
		14 6-33-47 1	
	Make and Model	Own. 74 Uwis. 74 Lyc. 3H Lyc. 3H Con. 72 Own. 281 Own. 33 Own. 33 Own. 33 Own. 84 Own. 87 Own. 88 Own. 88 Con. 5pec. 6 Own. 89	
	Tire Size • Decimals-Balleons	2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
	. sziZ suiT	N NNNNNNNNN	
	Wheel Base*		
	MAKE AND MODEL	Marmon 74	Chechain

for Economical Transportation



The Finest Chevrolet in Chevrolet History

Overwhelming success in building a quality car to sell at a low price has made Chevrolet the world's largest manufacturer of automobiles with modern three-speed transmission.

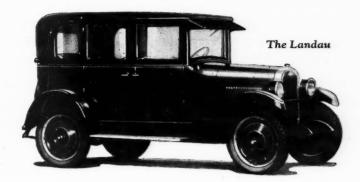
Now Chevrolet offers a car of even finer quality and greater value—the finest Chevrolet in Chevrolet History.

Here, in the Improved Chevrolet, is new smoothness, new stamina, new comfort, new roadability and beauty of alluring new colors. No other

car in its price class, regardless of size, weight or wheelbase offers such thrilling performance.

To these astonishing betterments in Chevrolet quality has been added the further attraction of new, lower prices. Today Chevrolet presents the greatest value ever offered in automobile history—a business investment for Chevrolet buyers and Chevrolet dealers that will bring permanent satisfaction and profit to both.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation



Touring - . \$510
Roadster - 510
Coupe - . 645
Coach - . 645
Sedan - . 735
Landau - 765
½ Ton Truck
(Chassis Only)
1 Ton Truck
(Chassis Only)
All Prices f. o. b. Flint,
Michigan

QUALITY AT LOW COST

Scores and Scores of Dealers are eagerly seeking the PEERLESS franchise

— these 3 cars offer a complete price range for quicker, surer profits in 1926

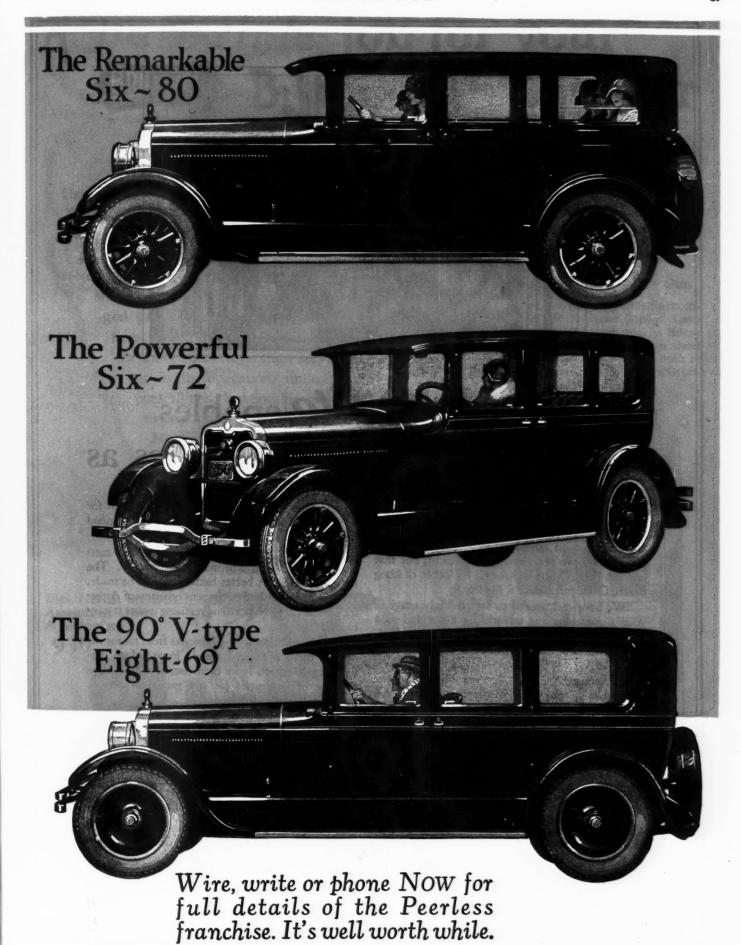
NEVER—in 24 years—has the Peerless contract been so eagerly sought by dealers and distributors.

Since the introduction of the remarkable Peerless Six-80, automobile men all over the country have realized that Peerless is offering a bigger profit opportunity than ever before—an opportunity absolutely unapproached by any other maker of fine cars. The possibilities are obvious—

Three different models—three different price ranges a real Peerless for every demand and for every purse.

PEERLESS MOTOR CAR CORPORATION, CLEVELAND, OHIO

Peerless has ALWAYS been a good car





Prest-Octe enables this company to do five times as much business batteries, and Mr. Cobb's success speaks well for

MULTIPLYING an already fine volume of battery business by five is no small achievement, but that is what Prest-O-Lite did for C. R. Cobb, of Long Beach, California. Here is his letter:

"We have endeavored to take full advantage of your suggestions and advertising helps and as a result we are doing five times the volume of business that we formerly did with a locally made battery.

"You can rest assured that we will put all our efforts behind anything you have planned. We know you have studied our needs and have a better perspective of the whole situation than we who are so close to local conditions."

Long Beach, California, is an extremely competitive field for batteries, and Mr. Cobb's success speaks well for the Prest-O-Lite Battery and for the well-planned merchandising that is back of it.

Any man who follows the Prest-O-Lite merchandising program will make more money. The battery is right. A better battery cannot be made. Already it is standard equipment on many of America's finest cars. National advertising makes it easy to sell.

And in addition to the business from motor-car owners there is the radio end. Prest-O-Lite Batteries, made especially for radio use, offer exceptionally fine opportunities for any garage or service station to make added profits.

Write us today for our interesting plan and for our service station proposition.

THE PREST.O.LITE CO., INC. INDIANAPOLIS, IND.

New York San Francisco
In Canada: Prest-O-Lite Company of Canada, Ltd., Toronto, Ontario



Prest-O-Lite



A part time job for your BRUNNER Brunner Compressor

Using your Brunner Air Compressor to refinish used cars by Spray Painting is only one of many "part time" jobs where Brunner helps to reduce labor costs and increase profits. Besides its assistance in increasing the salability of used cars, you'll find the Brunner an all-round shopnecessity. For cleaning motors, opening plugged gas and oil lines, grinding valves, filling tires, and other daily garage duties, the Brunner renders yeoman service. Unfailing in its operation, unlimited in its possibilities, inestimable in its laborsaving and profit - making ability.

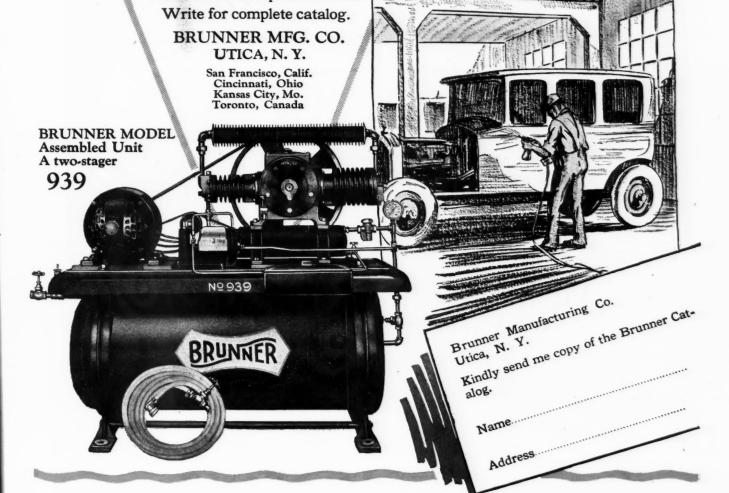
No shop can afford to overlook the

value of air as a power factor.

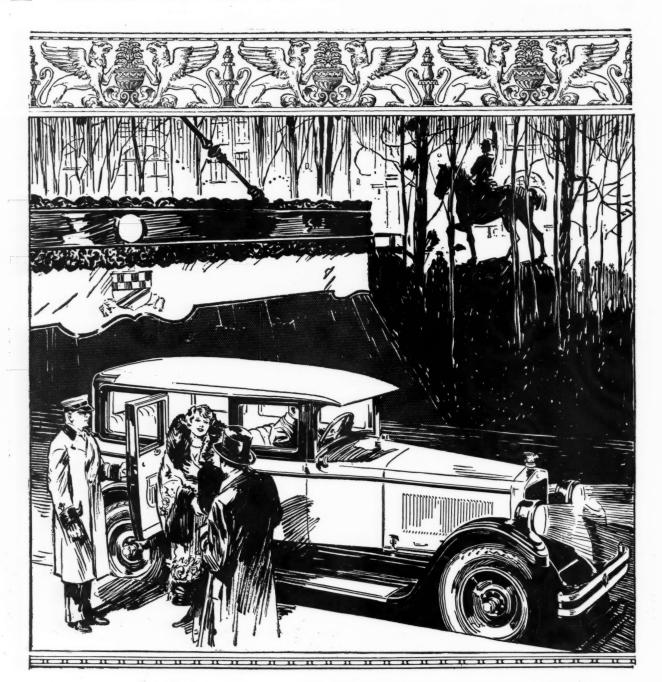


Brunner No. 500 Spray Gun

One of the many dependable members of the Brunner family. Lays the paint evenly and quickly. Saves material. Pays for itself in a short time. This tool is sturdily built to give long, constant service—a Brunner characteristic.



A Liberal Net Profit on



Public Esteem—Dealer Esteem
A Winning Combination!

See The GAR R

Every Sale-or Trade-in

This famous Gardner policy is winning wise dealers the country over to the Gardner colors. It's something every automobile dealer ought to know all about before summer rolls around

er's get this straight. Neither you nor any other automobile dealer has to jump thru hoops at the crack of a bigvolume production whip. You don't have to take in a lot of used cars at fancy prices. You don't have to work on a close margin of profit and gamble on tremendous sales to keep out of the red.

You don't have to buck competition with a car that looks and acts about the same as any one of a dozen others.

Not by a darn sight!

Ask any one of the 1,100 Gardner dealers. They're doing business on a sound, profitable, permanent basis. They've got a complete line of fine Sixes and Eights to sell—different in appearance, typically Gardner in performance, backed by aggressive merchandising and advertising.

And more than that!

They work with a friendly, human factory organization—with men who pull with them to help them get going and keep going on the right basis. The Gardner business is under the direct personal supervision of the men who own it—

there are no high-powered sales executives to load you up with cars you don't want and can't sell at a decent profit.

The Gardner factory-dealer policy means exactly what it says—A Liberal Net Profit on Every Sale—or trade-in.

Naturally, such a policy includes a bigger discount, which means a mighty nice trading allowance if you want to give it—and this without wiping your rightful profit clear off the map. A Gardner dealer can trade and make money on a basis that would put his less fortunate brothers on the wrong side of the ledger in no time at all.

And in these days of swift competition, that's some advantage.

Right now, Gardner dealers are getting all set for summer. They'll have the cars people want and will buy—a complete line of fine Sixes and Eights. They'll work under one of the simplest and fairest contracts in the business. And they'll be backed by one of the most powerful advertising campaigns in all Gardner history.

Jot your name and address on the side of this page, drop it in the mail box, and we'll shoot you the whole Gardner story.

THE GARDNER MOTOR CO., INC. ST. LOUIS, U. S. A.

GARDNER ASSURES YOU A LIBERAL NET PROFIT ON EVERY SALE

DNER



A Complete Line of Bumpers—and Interchangeable Brackets

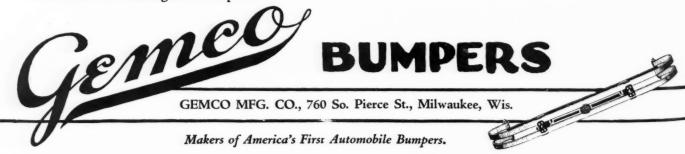
When you handle the Gemco line your bumper investment is working on a sound, profitable basis. One line for all cars, light, medium and heavy weight. One line, with a minimum investment of capital, producing volume sales—your capital released and re-invested over and over again to make additional profits.

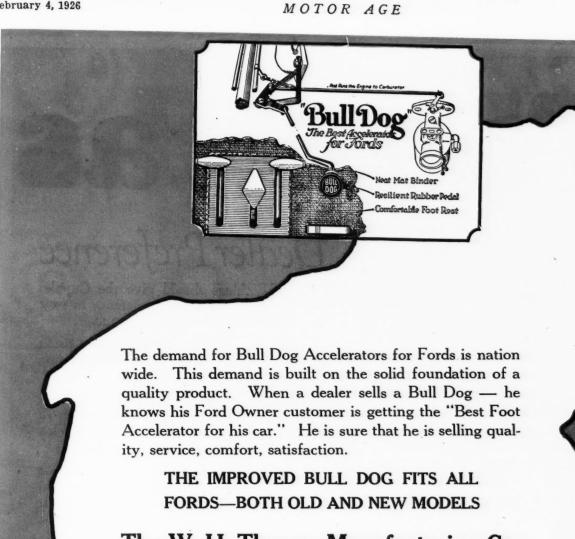
Gemco dealers are doing more than selling bumpers—they're making real money. They haven't any bracket problems. Gemco brackets have stopped all that. They fit properly. They're easily attached, hold securely and withstand powerful blows, just like the bumpers themselves.

Gemco brackets are interchangeable. They fit all cars and all bumper bars. Why, then, tie up your capital in other brackets?

There's a big difference between making bumper sales and selling bumpers at a real profit. You can't beat the Gemco proposition. Write for 1926 catalog and sales plan.







The W. H. Thomas Manufacturing Co. SPENCER, IOWA

The Best Accelerator for Fords

Tough as

Dealer Preference

THESE things should give the Cupples Franchise your first preference in your tire plans for 1926—and the future.

1—A better proposition and a bigger profit than you can get on any other standard tire.

2—The identification of your interests with those of an institution that celebrates its 75th Year of business success in 1926—with all the financial solidity and strength that such a Diamond Jubilee anniversary implies.

3—A product that will repeat—and one that reaches a level of achievement in the new Diamond Jubilee Models that invites favorable comparison with the finest tires made.

4—A consistent full page advertising program in The Saturday Evening Post and in The Country Gentleman that gives the product dynamic national appeal.

5—A tie-up policy on local advertising that's designed to give the independent dealer a protected margin of profit.

6—A permanent opportunity for the expansion of your business.

Write and suggest a date when you can conveniently give our representative an hour's conference.

OVER-SIZE CORDS & EXTRA HEAVY TRUCK AND BUS CORDS & BALLOON CORDS & INNER TUBES

CUPPLES COMPANY, Saint Louis A National Institution Since 1851



a Rhino"

CUPPLES Dealers are different, perhaps, because of the number of years through which they have uniformly found it profitable and satisfactory to retain their Cupples interests. The new Cupples program gives a bigger opportunity to all of them. If your city is not already covered, write or wire us today. Tire Division, CUPPLES COMPANY, Saint Louis





CUPPLES TIRES TUBES





NO MATTER how crowded the road may be. With headlights behind you, headlights before you, headlights to left of you—VISIONITE perfectly reflects every object to the rear without reflecting the blinding glare of the lights.

You have only to show the motorist a VISIONITE and he gets the big idea instantly. VISIONITE is as near a self-selling proposition as the automotive world has seen.

VISIONITE is not an experiment. We placed it on the national market only after extensive sales in a limited area had proved that motorists want VISIONITE.

VISIONITE The Non-Glare Driving Mirror



YOU KNOW how the ordinary driving mirror ceases to be a help and becomes a positive menace when it reflects the glare from the lights of the car behind.

So does every motorist.

You have only to show him by actual demonstration that VISIONITE reflects a perfect image, day or night, without reflecting the glare. After that there is mighty little room for argument.

With a product like that we would be foolish not to put back of it every ounce of sales energy we possess. And that is exactly what we are doing.

It is certainly worth your while to try out a trial ten VISIONITES on your trade and see for yourself how easy they are to sell. Let us tell you about the discounts and co-operation we have to offer. Drop us a line.

K-D MANUFACTURING CO. - LANCASTER, PA.

Manufacturers of the famous K-D Parallel Jaw Valve Spring Lifter

VISIONITE

The Non-Glare Driving Mirror

STEWART

Announces

FULL SIZE NEWSPAPER for Stewart-Warner Dealers! So extensive have become the operations of the Stewart-Warner Sales organization—so filled with the news that means opportunity for every Stewart-Warner Dealer—that we have added a newspaper staff to our Service Bureau.

A regular newspaper—the same size as the big dailies—and edited with the same Reader Interest policy—of gathering the news that the busy dealer should have —and giving it to him in a manner that he will find inviting to read.

The first issue is now in the hands of Stewart-Warner Dealers. Every two weeks there will be a right-up-to-theminute issue.

This publication will weld the great Stewart-Warner Family into a mighty unit for mutual benefit.



TWELVE MILLION PEOPLE ARE TODAY

-WARNER

An Important Campaign for Better Accessories

We make this announcement to the ENTIRE AUTOMOTIVE TRADE so that those car and accessory dealers who are not handling Stewart-Warner Products may know what Stewart-Warner is doing to help their dealers.

AND—this is but one of the really big things we have started for 1926. Our Window Display Division of the Dealer's Service Bureau is another recent development. -And there are others.

We will also publish—every two weeks—a newspaper of like size for our Radio Dealers. "The Announcer" will be the largest inter-organization publication in the Radio field.

To get the benefit of this co-operation—which no other accessory line offers—become a Stewart-Warner dealer.

STEWART-WARNER SPEEDOMETER CORPORATION
1826 DIVERSEY PARKWAY, CHICAGO, U. S. A.

SILOGOUS SENS APAGN TO ADDITION

Sale Of Pirate Parts Full

Sale Of Pirate Parts Full

City Danger To 1

Sale Of Pirate Parts Full

City Danger To 1

Sale Of Pirate Parts Full

Sold Carry Meagan to Bayer Sale Of Pirate Parts Full

Shock Absorbers

Bumpers

Rear Fender Guards
Spotlights

Electric Horns

Electric Horns

Electric Windshield Cleaners

Rear Vision Mirrors

Speedometers

Heaters

Heaters

Heaters

USING ST

Stewart-Warner Matched-Unit Radio

Vacuum Tanks

INSTRUMENTS - TUBES
REPRODUCER AND
ACCESSORIES

FROM THE STUDY OF LIGHT COME VICTOR LAMPS

Victorgrams

THERE'S A VICTOR LAMP FOR EVERY AUTOMOTIVE NEED

VOL. 1. NO. 6.

EDITED BY VICTOR LIGHT



"By George, Clardy, that's a real idea! You are certainly a merchandiser."

"To tell you the truth I never thought of it. I figured that if I delivered the car when the customer wanted it that I had done all that was required of me and all that would pay me a profit.

"And the customer feels the same way about it, too" Clardy added. "But what neither the customer nor yourself ever thought about is that at night the most important part of a car is its lighting equipment."

"Imagine the engineer of the Century driving with a headlight that throws its beam up into the sky and with every third or fourth semaphore light out of commission. He wouldn't do it of course. He works by strict rules. Yet an automobile approximates the speed of the Century under far more hazardous driving conditions.

"I tell you, Stanton, the lights on a car are vital.

"Every time you sell a car you should focus the headlamps and test all the other lights before you turn it over to the owner.

"And tell him what you've done and why. And with his attention on the subject of lights you can easily sell him a spot lamp, a parking lamp and a courtesy lamp, and make the deal of profit to yourself and of inestimable value to him.

"Of course, if you don't want to bother with all this, I'll gladly take care of it for him if you'll see that he drives right down to my garage," Clardy continued, slightly closing his left eye. "But I want to emphasize the fact that whether you do it or I do it, it should be done.

"If everybody in the trade will get to work on this vital subject of automobile lighting, the highways can be made as safe at night as they are in the daytime. "I may be somewhat of a crank on this subject but I'm so right about it that I have yet to find anybody who will give me an argument.

"Safe road lighting is one of those things that everybody agrees is needed but waits for the other fellow to do it.

"The car dealers and garage and service station owners can put this idea over and make money doing it, so why, I ask you, shouldn't we all enthuse?"

Valuable data and literature on the subject of automobile lights and lighting will be gladly sent on request.

Use coupon below. No obligation.

THE CINCINNATI VICTOR COMPANY
772 - 720 Reading Road,
CINCINNATI. OHIO



FILL IN AND MAIL THIS COUPON AND WE WILL SEND YOU FREE COPY OF 28-PAGE BOOK ON MOTOR-VEHICLE HEADLIGHTING.

NAME

ADDRESS.

THE CINCINNATI VICTOR CO.

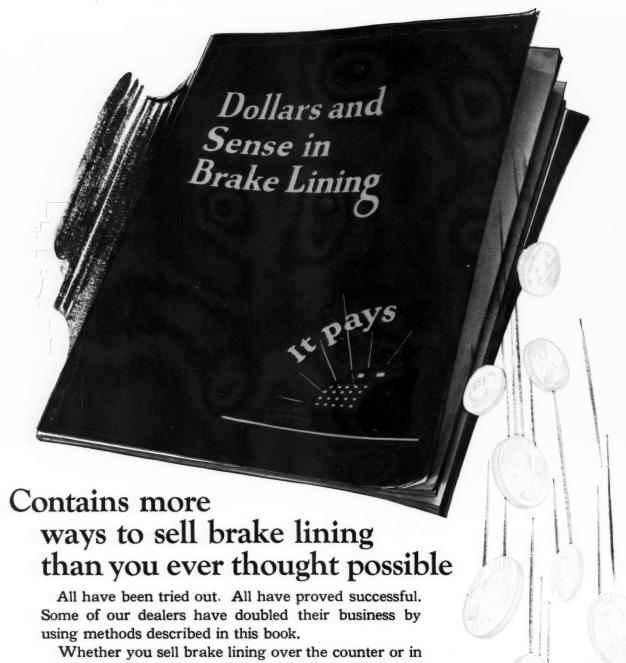
716 Reading Road
CINCINNATI OHIO

Dollars and Sense in Brake Lining

Rays

(over)

A profit getter —



Whether you sell brake lining over the counter or in a re-lining job, this book will be of tremendous value to you. As far as we know it is the most comprehensive ever turned out. Write for it now (under your letterhead).

Write to

JOHNS-MANVILLE

JOHNS-MANVILLE INC., 2924MADISON AVENUE AT 41st STREET, NEW YORK CITY

ASBESTOS BRAKE LINING CLUTCH FACINGS, PACKINGS, ETC.

The ALL-STEEL Body had to come! It gives salesmen a whale of a selling advantage

The All-Steel Body had to come. For years motor-cars got along with wooden bodies. But traffic increased. The risks of the road multiplied. Safety became a national problem.

Today, the trend toward the All-Steel Body shows how well Budd has met this need for safer motoring.

The Budd All-Steel Body is not a wooden framework sheathed in a shell of metal. It is *steel*, reinforced by steel . . . *all steel*, welded into a single unit. It has selling features that salesmen could never talk about before!

It can't crack, splinter or collapse under impact. It can't rattle or squeak. It has greater beauty. It is lighter, stronger, easily repaired, fireproof. It has removable upholstery.

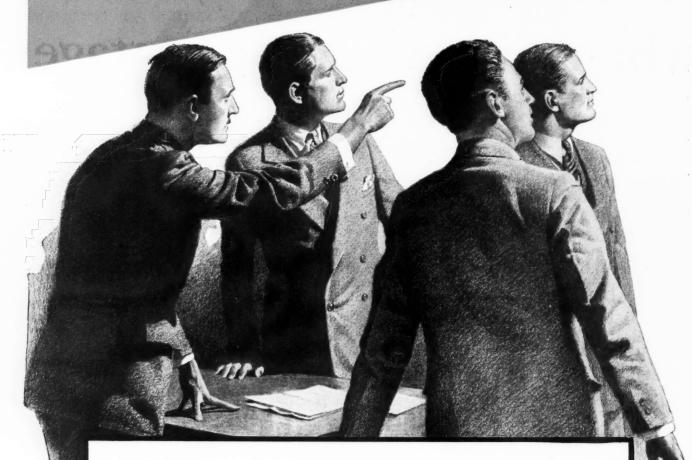
It is the new Full Vision Body with narrow corner posts, eliminating "blind-spots," lessening the chances of accident.

Budd created the All-Steel Body. The world is turning to it. It is the trend of progress . . . swift, inevitable!

EDWARD G. BUDD MFG. CO.

Philadelphia and Detroit

Do You Know



What it means to you~

Selling Shaler Vulcanizers is just like investing your money at compound interest—the profits on the steady repeat sale of Shaler Patch & Heat Units to use with the vulcanizer keep piling up. You are bound to get this repeat business because the Shaler is sold only through reliable jobbers and dealers.

No other auto accessory today is such a steady repeater — month after month, year after year — or pays dealers such a liberal profit on their investment.

Write for Attractive Window Display

C. A. SHALER CO., Waupun, Wis., U.S.A.

50 MILLION

SHALER PATCHES WERE USED IN 1925

..repeats..repeats!

This enormous repeat business last year was produced automatically by the sale of Shaler Vulcanizers in previous years. Usefulness, long-established popularity and big national advertising are steadily increasing the sale of Shaler Vulcanizers—thus automatically increasing the repeat sales of Shaler Patch-& Heat Units almost 50% each year.

All through 1926—dominating advertising in national media like Saturday Evening Post, Popular Mechanics, Liberty, Popular Science Mo., Motor, Camper and Tourist, etc., newspapers, farm papers—and plenty of selling helps—posters, displays, direct mail, etc. We'll tell'em—you show 'em and sell'em.

Foreign Sales
SHALER EXPORT CORP.
17 Moore St., New York, N. Y.

C. A. SHALER CO. Main Office and Factory Waupun, Wis. U. S. A. Branch Factories Beeston, England Montreal, Canada



Telling En

Fulton Advertising for 1926

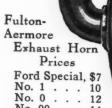
The first Fulton advertisement appears in one-half page space in the Saturday Evening Post of February 20th. It features the Fulton-Aermore Horn—"The Signal With a Smile," also the new and improved Fulton Accelerator for Fords and Fulton-Perfection Pedal Pads for all cars.

Each month following, page or half page space in the Saturday Evening Post will reach millions of interested car owners. This advertising in America's leading national publication is valuable to every dealer selling Fulton products. It will provide unusual sales opportunities. Take full advantage of it by stocking Fulton products and using the practical selling helps we offer.

Fulton-Aermore Demonstrator

Here is the most valuable sales producer we have ever supplied for dealers selling Aermore Horns. Hand operated. Demonstrates the Aermore right in your store. Place it on

your counter and it will work wonders for you in promoting interest and closing sales. Supplied free with your order for six or more Aermore Horns. Ask your jobber or write us.



AERMORI

No. 00 . . . 14
No. 000 . . 16
Always give make and model of car when ordering



The \$2.00 Outfit For Ford Owners

Almost Sells on Sight

A complete set of Fulton-Perfection Pedal Pads and the new, improved Fulton Accelerator -sell both for \$2.00 with a real profit. Think of it! What Ford owner could resist a combination like this?

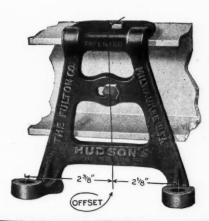
Fulton-Perfection Pedal Pads

Made of soft, live rubber, firmly encased in strong, nickeled frames. Keep feet from slipping off pedals. Adds safety to driving. Set illustrated in combination outfit above is Type D-26 for new model Fords. Per set of three, \$1.00. Also sets for all other cars, per set of two, \$1.00.

New Improved **Fulton Accelerator**

Simple—easy to install—direct action to carburetor. Foot pedal is placed 5 inches away from brake. A real safety feature, prevents striking accelerator when applying brake pedal. Price complete, \$1.00. Ask your jobber or write us for full information on Fulton products.

Automotive Equipment Pace Setters of Quality



Hudson Repair Arm. Patented features permit easy installation without forcing into position - holds motor in perfect alignment. Perfect fit assured. Malleable iron, with plenty of strength. Price each, \$1.50.



Actual size set of Ford Pedals with Perfection Pedal Pads and the new Fulton Acceleratorneatly mounted on metal display stand. Attractive-a real sales maker. Supplied free with a reasonable order.



Type 7 Fulton-Perfection Pedal Pads. Especially designed for Buick, Chrysler 6, Dodge, Chevrolet, Oldsmobile, Packard, Studebaker, etc. Also types for all cars. Fast sellers. Per set of two, \$1.00.



Wrench. Has four size sockets and handle that gives 300 per cent more

leverage when adjusted at right angle to socket. Handiest tool in a service garage. Stands tremendous abuse. Quick seller. Price, \$3.50.

the Headlinerat the New York Show the new 70

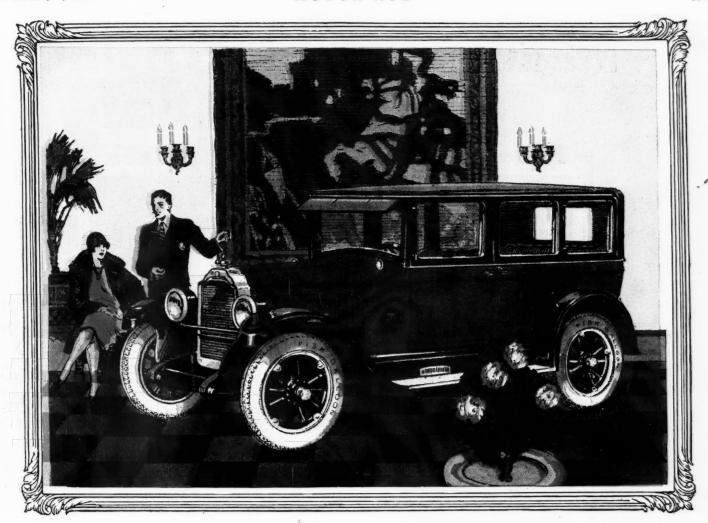
WILLYS-KNIGHT

102,909 visitors

594
retail orders

During the week of January 9-16, 102,909 men and women were clocked in at the formal presentation of the new "70" Willys-Knight Six at the Willys-Overland Branch showroom, Broadway and 50th Street, New York—this vast army of people finding it impossible to give this phenomenal new car close enough examination—so great were the crowds around it at the Grand Central Palace!

In the same brief period of 7 days, 342 cars were sold at retail at the Willys-Overland Branch establishment—and New York City dealers booked bona-fide orders for 252 more. Of this total of 594 sales, 182 were for the new "70" Willys-Knight Six!



"70"Six 5-pass.Sedan \$1495 | FRICES F.O.B. 5-pass.Touring \$1295

ALL PREVIOUS RECORDS BROKEN

Never before since the first automobile ran has any new car so aroused the interest and enthusiasm of the public as did the new "70" Willys-Knight Six on its formal presentation at the recent National Automobile Show and, concurrently, at the Willys-Overland Branch at New York City.

Last year it was thought that entirely new standards of popularity had been established with the showings of the then new Overland and Willys-Knight Sixes, when over 15,000 people passed through the doors of the Broadway showroom during the first Sunday of Show Week.

But, this year, all previous records were shattered beyond repair when, between the hours of 3 p. m. and midnight, on Sunday, January 11, the almost unbelievable total of 20,071 people, by actual clock count, had visited the New York Branch display, and during the 6 days following there were registered 82,838 more!

And this one week's sales-success speaks for itself—182 retail orders for "70" Sedans, plus 412 for other models of the line. Thus were broken all known records for attendance at a private showing of motor-cars by any one retail organization, and a new pace set for volume of sales during this or any previous New York Show!

With the new "70" Willys-Knight Six, the great Willys-Overland Line now gives practically 100% market coverage. It is the most comprehensive group of quality cars, at the widest price range, ever produced by any one maker. Here is a salesand-profit opportunity unparalleled in the industry for the up-and-coming dealer. Write Toledo for dealer franchise details.

WILLYS-OVERLAND, INC., TOLEDO, OHIO WILLYS-OVERLAND SALES CO. LTD., TORONTO, CANADA

Makes Every Mechanic a Speed King!



In CIMOIOICE.
The Asbestos Brake Lining

926



A MOMENT saved is a penny earned—as every garage man knows. Every time you cut the cost of labor you add a little velvet to the bank roll.

The Thermoid Rubber Company is always on the lookout for new ways of making Thermoid Brake Lining jobs more profitable to the garageman. Our latest little labor lessener is the Thermoid Drilling and Countersinking Machine. Electrically operated, it drills and countersinks with a speed and accuracy absolutely unattainable by hand methods. The automatic action of the finder enables the operator to keep both hands on the brake band at all times.

This machine when used in connection with the Thermoid Riveting Machine makes a brake lining renewal a quick, accurate and profitable machine-job from start to finish.

Thermoid Drilling and Countersinking Machines and Thermoid Riveting Machines are furnished to bona fide Thermoid Garages and Service Stations at special reduced prices.

And speaking of new things. The new close-set twill weave now used in the making of Thermoid Brake Lining is something to write home about. It makes Thermoid the boss *all*-weather lining that assures just the right brake action, rain or shine.

The new Thermoid is perfect for passenger cars and trucks. Wherever extraordinary service is demanded of passenger cars, trucks and busses, you can rely on Thermoid for the dependable job.

THERMOID RUBBER COMPANY
Factories and Main Offices
TRENTON, N. J.

Makers of Thermoid and Rexoid Transmission Lining, Thermoid-Hardy Universal Joints, Thermoid Radiator Hose and Mechanical Rubber Goods



Thermoid-Hardy Universal Disc

If it's service you want make your universal joint replacements with Thermoid-Hardy Discs. The Thermoid-Hardy's patented fanwise fabric construction outlasts metal. It absorbs jolts and requires no oil or care.

Like Every Thermoid Product—It WEARS

Thermoid Radiator Hose

The perfect radiator hose. Specially constructed to withstand the action of oil, antifreezing solutions, hot and cold water. Thermoid Radiator Hose will not swell during service nor will the plies or the tube separate.

Like Every Thermoid Product—It WEARS

Hydraulic Compressed
Brake Liming

For short stops and long service

There's an Ample Stock of Eaton Bumpers only a Phone-Call Away

This means you can do a whale of a business on a mighty little investment

No matter where you're located, you are doubtless within easy reach of a complete stock of Eaton Bumpers.

This wonderful, new service for Eaton dealers comes with an entirely new development in the Eaton distributing organization. It means you can safely carry a minimum Eaton stock and make bigger profits because of the quick turn-over.

No reason, now, why any bumper business should get away from you. There's an Eaton Bumper exactly right for the car you sell or any car that rolls into your shop. If you can't fill the bill on any order, or if your stock of Eaton Bumpers runs low, just call the nearest Eaton distributor. Your order will be delivered from nearby Eaton stock.

Get in line now to take advantage of this remarkable profit opportunity. Call the Eaton distributor today or write us direct for complete information.

THE EATON BUMPER & SPRING SERVICE CO. Cleveland, Ohio

【The Eaton organization also produces the】 【famous Eaton Axles and Eaton Springs】



EATON BUMPERS



Anybody can set up a pump on the roadside and peddle gas. But to win and hold a majority of the passing gas buyers, you've got to render perfect, courteous service. And "Free Air" Service goes a long way to bring them in.

With a Quincy Compressor in your station silently delivering instant pressure, year in and year out, every customer will bring a new one. It won't cost you a cent to let us explain just how a Quincy Compressor can increase your profits. Merely fill out the coupon and mail. You'll get full details immediately.

QUINCY COMPRESSOR CO., Quincy, Ill.

Formerly Wall Pump & Compressor Co.

Quincy Compressor Co. 217 Maine St., Quincy, Ill.

Without being obligated I would like to know how a Quincy Compressor can boost my sales and profits.

Name___

Address_

City__

State.

QUINCY COMPRESSOR CO.

Model G-16 Quincy Silent Air Master

Quincy



Illinois

Pistons and Pins for All Our Models

TWO factory service managers met at the show. "When the long distance calls," said one, "it seems to me as if some long-lived motor car we turned out in the early days had broken down in the farthest corner of the map just to show where my inventory on replacements is down."

"We used to have that problem, too," said the other, "especially on replacement pistons and pins for our older models. But I have solved it. We no longer take machines off the production—nor run excessive stocks of pistons and pins for replacements. Our method is simple, it is economical—and it's service.

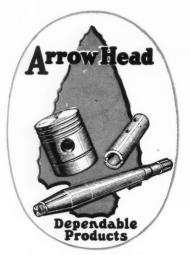
"Arrow Head, organized to make short runs economically, keeps our inventory of pistons and pins up to set figures for all models we service. On obsolescent models, we simply relay the emergency call to Arrow Head and they do the rest.

"The factory saves four ways.

"Yes, Arrow Head is organized to serve any car or truck factory on pistons and pins—and they have gone farther in perfecting them than any of us."

There are scientific and economic reasons why engineers who know specify Arrow Head consistently—on equipment as well as replacement runs. Let us

demonstrate our capacity to meet your specifications.



Each genuine Arrow Head part is marked with an Arrow Head



Always in Stock - Never Overstocked



ARROW HEAD STEEL PRODUCTS COMPANY

MINNEAPOLIS, MINNESOTA

Head d

Axle and Drive Shafts



Clear Vision Increases the Value of Your Window Display

Pedestrians and motorists passing by, look into those windows through which it is easiest to see.

It is, therefore to the advantage of every automotive merchant to display his goods in large spacious windows of modern design.

A more vivid comprehension of the value of "clear vision" can be obtained by comparing the old fashioned front with the modern front of today. The former was merely a partition with glass in it to admit daylight, keep out the elements and act as sort of an enclosure for the crude exhibition of merchandise.

The modern front not only protects the interior from the elements but also enables progressive merchants to trim their windows in a sales producing manner.

MODERN

Kawnee Topper Store FRONTS

are profitably serving over a quarter million merchants.

"The Wrench People" Announce

A Finished Wrench— At the Semi-Finished Price



Ask your jobber's salesman about the new Williams Wrenches. These fully finished tools are the greatest wrench value ever offered in a standard stock line.

The black finish that is smoothly spread from head to head isn't lacquer. It's enamel — baked on.

Priced low, too! Priced at the price you've paid for drop-forged wrenches that were only Semi-finished.

A superior wrench—more durable — more serviceable — more sal-

able. A smooth surfaced — case hardened wrench, with openings milled to precise accuracy, and sizes stamped on the bright heads.

It takes the place of Semi-finished and Finished (mottled and nickeled) wrenches which we formerly made, and now discontinue.

Whether you buy wrenches for use or resale, you'll find the new Finished line a superior product at a remarkably interesting price.



Send for Descriptive Literature



J. H. WILLIAMS & CO.

"The Wrench People'

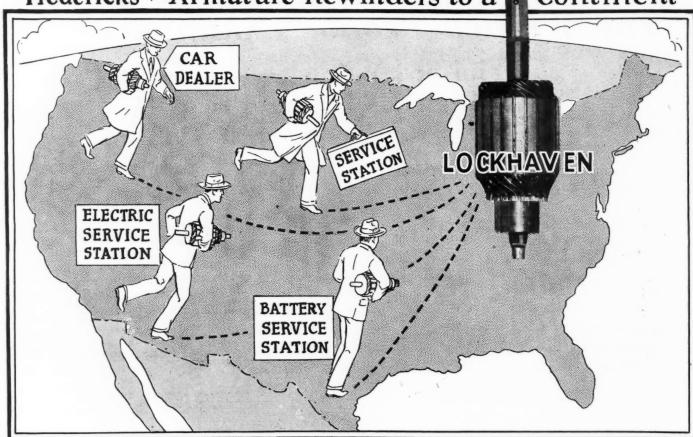
New York

BUFFALO

Chicago

PICARD-SOHN





YOU, too, can make Rewound Armatures PAY!

Car Dealers, Battery Service Stations, Ignition Repair Shops, General Repair shops in every State send armatures to Lock Haven for Rewinding.

There's not an automotive man in the country who can't take advantage of the better profits made by selling rewound armatures. Car Dealers, Battery Service Stations, Ignition Repair Shops, and General Repair Shops in every State send over a thousand armatures to the Fredericks plant every week for rewinding. Fredericks Service covers the continent.

You pay from \$1.50 to \$10.00 less for an equal to new Fredericks rewinds, getting the same guarantee that is given with a new

Consider the added advantage of handling Fredericks Rewinds this new way. Instead of waiting for a Fredericks Rewind to come from us, carry a few of the most called for sizes in stock for emergencies and instant exchange service. Return the burned-out cores to us as you accumulate them, letting us replace them, etc. Save time. Get a longer discount.

armature. You set your own selling price. By selling Fredericks Rewinds you can charge a lower price and still double your profit for the job.

Facts about the possibilities and profits in handling Fredericks Rewinds are sent free. Fill in and mail the convenient coupon now.

FREDERICKS REWINDS

The H. M. Fredericks Co., Lock Haven, Pa.

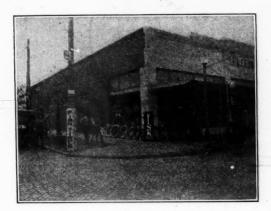
Gentlemen: Send me full information on Fredericks Rewinds—prices, discounts, guarantee and service data. I am a

Name

(Inquiries and customer names held in strictest confidence)

You Can Count on a Big Oak When You Concentrate on Fisks

The old story about "Big Oaks from little acorns grow" is a true one when you consider the business growth that comes to dealers who decide to concentrate on Fisk Tires.



(Oklahoma)



(West Virginia)

We have hundreds of examples which show what strong business builders Fisk Tires are. For instance:

Here is a dealer in Oklahoma who began selling Fisk Tires in 1922 with a capital of \$14. Today he carries a stock of Fisks worth about \$6,000—has his bills all paid and a substantial deposit in three banks in his town.

Here is a dealer in West Virginia who several years ago bought four or five Fisk Tires at a time. Last year he sold \$15,000 worth of Fisks in a town of less than 2,000 population.

Decide now to

Follow the Fisk



Boy in 1926

Time to Re-tire

Get a FISK

Trade Mark Reg. U. S. Pat. 0

THE DOUBLE



From 16th to 9th place in the industry—that is the outstanding sales record which Oakland dealers have made in a few short months, with Oakland Six alone to sell.

Now, to this already profitable line, add the tremendous buying appeal of a new fine quality Six, the Pontiac, selling at \$825 for coach or coupe.

Together, under the Oakland-Pontiac double franchise, these cars offer the business opportunity of a lifetime to any ambitious, aggressive automobile merchant.

OAKLAND SIX

WINNING AND HOLDING GOOD WILL

PRODUCT OF GENERAL MOTORS

FRANCHISE



They provide nine new open and closed models with a price range of \$825 to \$1295. They give commanding entry into the richest motor car market in the world. They open wide the way to double profits and sales leadership in your community.

Able dealers who have been watching Oakland's increasing dominance in its field see in the double franchise a double opportunity. Why not write today?

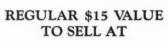
OAKLAND MOTOR CAR COMPANY, PONTIAC, MICHIGAN

PONTIAC SIX

CHIEF OF THE SIXES

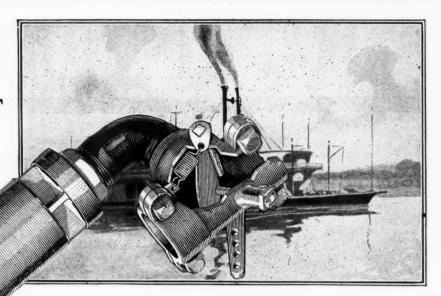
As MELLOW as a STEAM BOAT WHISTLE

4-TONE **EXHAUST** HORN



Mail This Coupon Today! Delay Means Double Profits Lost

"Toot Sweet" is fully guaranteed, easy to install and easy to sell - a sure fire hit. Don't delay in sending for particulars of generous discounts to dealers. No obligation. Just mail the coupon below. But do it now!



Two Big Profits From **Every Sale**

Sell and Install This New Horn

ALREADY there exists a great demand among motorists I for exhaust horns. Everywhere, every day horns of this type are rapidly growing in popularity. And now, with "Toot Sweet," you can supply and satisfy your trade with a \$15.00 horn at half price - and make a double profit!

One Horn — Two Profits

"Toot Sweet" fits every car. You sell it for only \$7.00 thereby making a handsome sale profit and, in addition, a big installation profit. Two profits on every sale, and every motorist is a prospect. Send coupon today for discount details.

ILLINOIS BRASS MANUFACTURING CO., Chicago

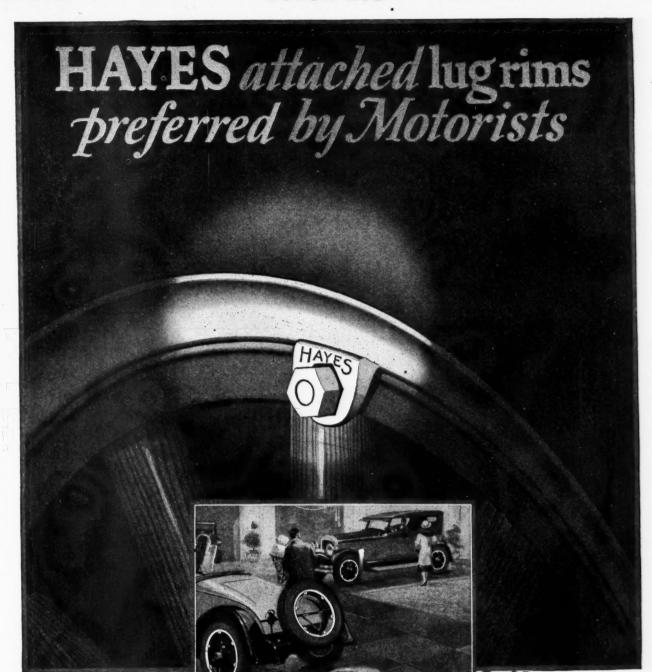
Toot Sweet

ILLINOIS BRASS MFG. CO., 222 North Ada Street, Chicago, Ill. Please send me full information on "Toot Sweet" the new 4-tone Exhaust Horn.

COMPANY NAME.

ADDRESS.

......CITY......STATE.



Because they eliminate rim squeaks eliminate torn valve stems distribute driving strain save time in tire changes save tire wear save service expense LOOSE LUGS ARE BEHIND THE TIMES

HAYES WHEEL COMPANY, Manufacturers, Jackson, Michigan

Factories: Jackson, Albion, Flint, St. Johns, Mich.; Anderson, Ind.; Nashville, Tenn. Canadian Plants: Chatham and Merriton, Ont. Export Office: 30 Water St., New York City

HAYES WHEELS

WITH ATTACHED LUG RIMS~STANDARDIZED IN WOOD, WIRE AND DISC



His Lyon Steel Counters Sell Goods

In connection with the largest and handsomest filling station in San Antonio, Texas, Mr. Carrol B. Bassett does a wholesale tire and retail automotive accessory business.

Mr. Bassett writes that the five Lyon Steel Counters used in his retail division have effected, by the display they make possible, many additional sales of accessories.

The Lyon Steel Shelving back of the counters also solves the problem of neatness and order. For convenience, too, they permit an arrangement that cannot be surpassed. Every item, as you can see, is instantly available.

Your own business should prove easier to run and productive of larger profits if equipped with Lyon Auto Parts Control—the complete steel storage and display system for automotive parts and accessories. There is a Lyon System for your particular business, no matter how many cars you service. Write for complete information.

Lyon Metallic Manufacturing Company

Eastern Factory Newark, N. I.

AURORA, ILL.



Leading Automotive Jobbers Sell

AUTO PARTS

COMPLETE STEEL STORAGE SYSTEMS FOR AUTOMOTIVE PARTS AND ACCESSORIES

New Departure Ball Bearings make your electric motors worth more, whether they cost you more or not.

They reduce re-winding costs due to burntout motors, as much as 70%.

They rarely require attention oftener than every nine months, and reduce oiling and inspection costs at least 82½%.

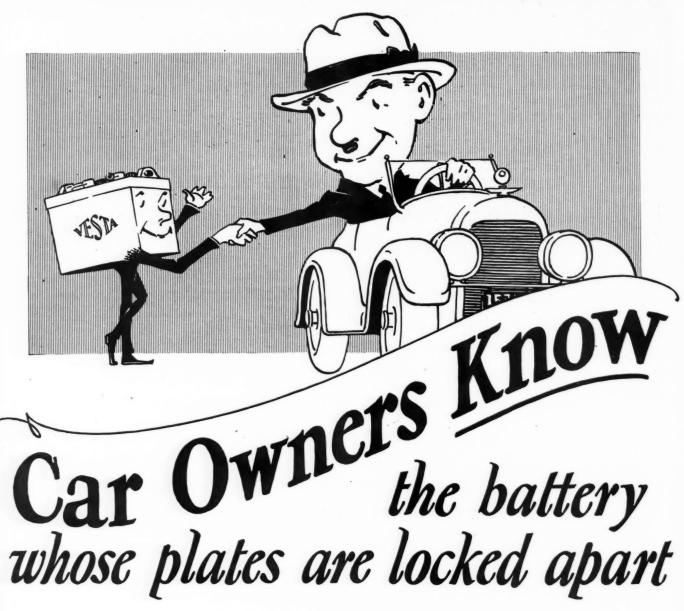
They reduce the cost of replaced bearings at least 81%, and the time and labor of installing them over 88.5%.

Motor manufacturers can supply you with New Departure equipped motors.

The New Departure Manufacturing Co. Bristol, Connecticut

Detroit

Chicago



The Vesta Isolator means as much in your life as in battery life. It means freedom from com-

locks the plates apart. For ten years Vesta reputation for longer service has steadily grown. Today a million users prefer to buy a

petition, because only Vesta has the feature that

Vesta Battery Corporation

Vesta—the battery whose plates are buckle proofed.

You never need to cut the price of a Vesta.

Your profit is always the discount on the list.

Ask a dealer who handles Vesta Batteries. He'll give you the name of your Vesta Central, too!

2100 Indiana Ave., Chicago

VESTA

Every User a Human Advertisement

cle

ta. on

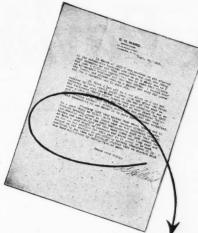
atof

O



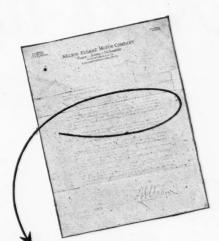
"We were successful in selling 48 Paiges and Jewetts during this time, first year with Paige-Jewett, and enjoyed a nice, healthy parts and repair business besides. All this was done on an invested capital of \$12,000, with about \$1,000 invested in a stock of parts.

Eastern Wisconsin Motor Co. Sheboygan, Wisconsin



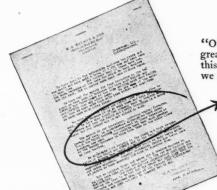
'As far as our profits for this year, it is going to be much larger as our service is practically noth-ing and our capital that we started with has been multiplied by thirty-five or more.'

G. H. Ward, Auburn, N. Y.



"Since 1922 we have increased our paid-in capital stock over 30% and our financial statement shows a surplus equal to 35% of the paidin capital stock, whereas we had a deficiency at the time we signed the first Paige-Jewett contract."

Nelson-Eubank Motor Co. Colorado Springs, Colo.



"Our profits have been much greater on the amount invested in this line than on the other lines we have handled."

M. A. Nelson & Son, Champaign, Ill.

- and they'll make still more money in 1926 with -PAIGE

The Most Beautiful Car in America

All prices are f. o. b. Detroit tax extra

If You Want To Share In This Prosperity— WRITE!

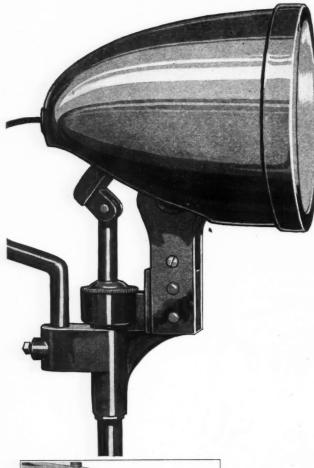
Paige-Detroit Motor Car Co., Detroit, Michigan

Gentlemen:-Without obligation, you may send me information about the Paige-Jewett franchise.

Name

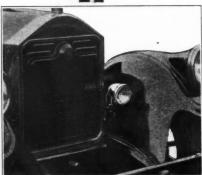
Address

"Next to Daylight" Sells

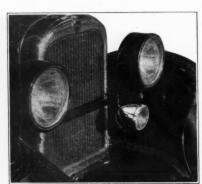


Price \$1850
With All Fittings

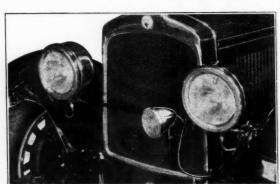
Space 141
at theChicago AutomobileShow



Pierce-Arrow Justallation



Nash Installation



Jordan Installation



Packard Installation

Me Walden Fore-Lite



Drivers of automobiles want to see at night.

That is why they buy the light which comes closest to giving them an illumination like daylight.

The Walden Fore-Lite is next to daylight. It illuminates clearly without glare. It operates from the instrument board and focuses on the road, or on any object along the way. It is installed between the headlamps, ahead of the radiator, close to the road. It is bright enough to relieve the strain of uncertainty when used with ordinary brights or dims. And it is a beautiful addition to any car.

Dealers and wholesalers, of course, want to sell their stock at a profit. The Walden Fore-Lite does that too. It turns over fast, and the profit on an \$18.50 list is well worth while.

There is a big demand for Walden Fore-Lites. They have been highly praised at the shows. See them, or write us for detailed descriptive literature.

Walden Fore-Lites sell!

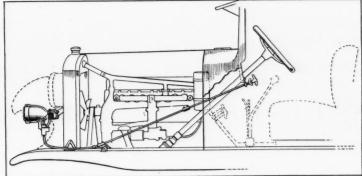
The Walden Company

1114 So. Michigan Ave.

Chicago, Ill.



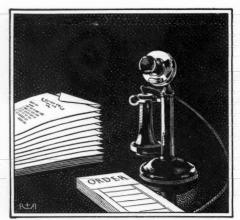
Chrysler Installation



Principle of All Installations

After five years of writing

a \$40,000 order on the first long distance call



FOR 5 YEARS a New York concern wrote a southern construction company trying to get a first order for finished material in carload lots. Twice each year the sales manager mailed prices that he knew were right. No response. Finally, when the semi-annual request for quotations came in, he reached for his telephone and got the purchasing agent,

a thousand miles away, on the wire. Prices and conditions were discussed and he took the order then and there. It amounted to \$40,000!

In thousands of businesses today the long distance telephone is getting results that otherwise would be lost. Long Distance cuts out waiting and gets the answer. It gets immediate consideration for important matters. It gets past closed doors, for its mission is obviously to serve. Many times Long Distance gets first orders where all other means have repeatedly failed to get an audience.

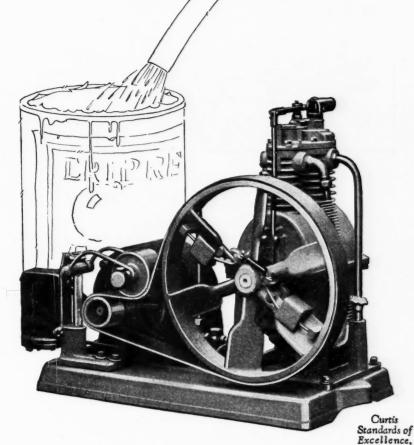
Have you studied your own business to see how many telephone opportunities are being neglected? Is the telephone used only in an emergency, or are your department heads and the members of your sales staff trained to use Long Distance regularly to cut expense, to make sales or purchases that otherwise could not be made? Long Distance has a place on the program of every business that has or wants more than a local territory.

The Commercial Department of the Bell company will gladly, upon call, make a study of your business and suggest a regular plan for long distance calls. In the meantime, what far-distant man or concern would you like to talk to? The telephone on your desk will connect you, just as it does with anyone wanted in the next town or the next building. . . . Number, please?

BELL LONG DISTANCE SERVICE



URTIS



No spitting of oil

When the Curtis automatically cuts out, there is no discharge of oil under high pressure through a tube onto the floor (or into a container placed to catch this oil), thus avoiding both this muss of oil and the fire hazard it creates. This is due to the fact that the Curtis type of automatic starting and stopping control

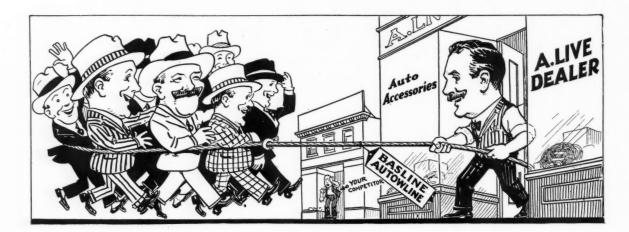
eliminates entirely the need for the customary so-called expansion chamber after-cooler or filter, with its complications, leaky air valves and oil spitting bleeder. The Curtis Centrifugal Unloader governs the starting load by speed conditions alone. Such construction features as this have established Curtis leadership.



n

In the final analysis, growth is primarily an accumulation of satisfied customers. Nothing else could have maintained the CURTIS Pneumatic Machinery Co.
1527 Kienlen Ave., St. LOUIS, MO.
Branch Office: 530. H Budson Terminal, New York
Gentlemen—Please send me full details on Curtis Air Compressor, your proposition and prices

Curtis for 72 years. Address. Address.



Easy Sales—Good Profits—With the Original Wire Rope Towline

If you'll just let motorists know you carry Basline Autowline by giving it prominent display space, you'll certainly pull a lot of customers into your store. Because Basline Autowline enables the motorist to cope with any trouble or delay that may arise, such as skidding in a ditch, engine "going dead," etc., it is a real necessity to him.

Basline Autowline is — the *original* wire rope towline — the only towline which has been nationally advertised — the only towline with patented Snap Hooks that prevent loosening — the only towline made of world-famous Yellow Strand Wire Rope. Above all, it is the towline of exceptional, *proved* strength.

Reduced Prices:

Basline Autowline ought to sell for more than any other line on the market. But we realize that at a lower price, the present large and steady volume of sales could be greatly increased—so this season we considerably reduced the price to the trade. Price list and descriptive circular on request.

BRODERICK & BASCOM ROPE COMPANY, ST. LOUIS, MO.

Eastern Office and Warehouse 76 Warren Street, New York City



BASLINE AUTOWLINE



FREE: Something to help you make greater profit selling tires. A real money making idea. Read details below. Find out about this . . . today.

A "Red Hot" Opportunity plus —these 3 big advantages

A new sales policy.. a special demonstration proposition.. sound financial strength. This tells how to make profits double those you now get. Read details here:

By RAY H. PADDOCK

HERE'S a tire—a truck and bus cord—that we actually help you sell! And you make just double your normal profit.

There's a Bus or Truck Fleet account that you'd like to get. This gives you a new chance — to land that business.

Because today, you can demonstrate this tire without obligation to them or risk to yourself.

Don't worry about capital!

You don't have to worry about money or limited finance on this proposition! If conditions are right—the prospect is right—we make

the prospect is right—we make arrangements for absorption of credit.

Any risk there is, is our risk.
And we're willing to take it be-

this tire—made it—know what's in it...
The tire itself is built up to quality regardless of cost. Ten ply, finest long staple cord fabric—fulled

 $1\frac{1}{4}$ " staple.

cause we believe in

By frictioning process with heavy steel calenders, rubber is driven through the fabric—completely impregnated.

Double breaker—double cushion—covered with the most costly tread we ever put on an automobile tire!

The 36 x 6 weighs 71 lbs. without flap or wrapper. Compare this in weight—in size, appearance and durability with any tire you've ever handled. And remember:

You can't get mileage out of a tire by writing it in . . . you've got to build it in.

Act on this . . . TODAY.

Through concentration on volume, low distribution cost, we are able to offer this really superior tire at a strictly competitive price.

Write me—today. Only one dealer in each town can work this proposition. You must act quickly—right now!
At least find out about this unusual opportunity—how it will help you—to more sales, greater profit.

RAY H. PADDOCK





You can install a Bunting Phosphor Bronze Bushing Bearing with much more ease and satisfaction than a bushing made of brass, rolled sheet, tubing, or inferior metals. And it delivers an immeasurably greater value to the car owner.

Bunting Bushings are now packaged in handy cartons containing 12. They cover all replacement requirements in pistons, springs, and steering assembly of all popular automotive vehicles, including latest models. Ample stocks carried by leading wholesalers everywhere.

THE BUNTING BRASS & BRONZE CO.
Toledo, Ohio

BRANCHES AND WAREHOUSES AT

NEW YORK 245 West 54th St. Columbus 7528 CHICAGO 2015 S. Michigan Ave. Calumet 6850-6851 PHILADELPHIA 1330 Arch St. Spruce 5296

SAN FRANCISCO 198 Second St. Douglas 6245

BUSHING BEARINGS

BOSTON 36 Oliver St Main 8488

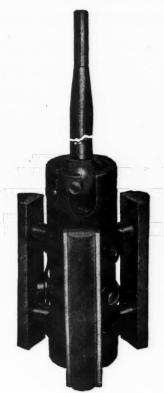
BUNTING PHOSPHOR BRONZE BUSHING BEARINGS

PATENTED

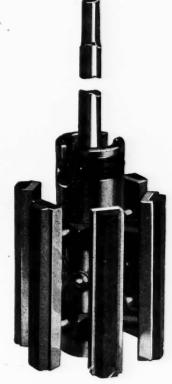
HUTTO

(Positive Set)

Production and Portable Cylinder Grinders







Give Guaranteed Accuracy

HUTTO (Positive Set) Production and Portable Cylinder Grinders are self-aligning and self-centering tools. With them it is impossible to grind bores out of parallel or out of round. After once setting, they are absolutely positive and unchanging. Their work is of the highest quality. Their accuracy is guaranteed.

Going Big — 16,000 Strong

Such a recommendation proves that under stress of service they stand up and make good. And so does the fact that they are being used in regular production by most of the automobile manufacturers in the United States.

All this means one important thing to you—HUTTO dependability, quality and accuracy make more profits. HUTTO-made business pays.

Ask any HUTTO jobber, or some of the 16,000 satisfied users. Or better—get one making money in your shop.

HUTTO ENGINEERING CO.

517 Lycaste Ave.

Detroit, Mich.





A Simplified

Electric Windshield Wiper

Retailing for

Quick, simple installation for all cars, including the new enclosed Fords and cars using the Fisher type, one-piece windshield. Coperates from the storage battery, using less than one ampere-hardly as much as a tail light. A simple tandem attachment costing but \$1.50 additional is practical and popular.



Guaranteed to the limit by the Owen-Dyneto Corporation, Syracuse, New York, manufacturers for many years of high quality electrical equipment for America's fine cars.

Engineers of the World Prefer Gabriels

American Cars Standard equipped at the factory with Gabriel Snubbers

Buick Master Six Closed

Elear

Gardner Eight

Gardner Six

Henney

Hert.z

Hupmobile Eight

Hupmobile Six

Jewett Six

Jordan Eight

Junior Eight (Locomobile)

Junior Six (Locomobile)

Kissel Eight

Kissel Six

Oakland Closed

Overland Six

Packard Six

Peerless Eight

Peerless Six

Studebaker Big Six

Studebaker Special Six

Willys-Knight

European Cars
Standard equipped at the factory with Gabriel Snubbers



A.C. Adler Crossley F.N.

Fiat. Horch Berliet Maybach Star

Ceirano Mercedes Morris Ope1

Rover Simson Stoewer

Walter Wolseley

Laurin&Klement

Write today for the liberal Gabriel Sales Proposition

The Gabriel Snubber Manufacturing Co. 1415 East 40th Street, Cleveland, Ohio Toronto, Canada

oriel

There is but one Snubber, in name and principle

This Is A Message To the Man Who Is Interested In An Entirely New and Highly Profitable Method of Merchandising Piston Rings

Last week this same page was devoted to telling about Simplex Piston Rings and a money making method offered the industry by their use.

You were also told of their background of satisfactory performance and the large organization of practical automobile service men who assure users of results and not merely promises.

In these days of flat rates you service men have to make your profits on quick operations and products which assure no come-back costs.

This profit is assured you by Simplex rings because they are backed up by reputable factory-appointed distributors in your community who will guarantee not only the Simplex rings they sell, but stand back of the labor involved in the job if they do not fulfill the claims made for them.

Simplex Piston Rings have many unique features of design and construction. They are the only one piece side-expanding ring in the field. They will absolutely eliminate piston slap, stop oil pumping and restore lost compression regardless of the wear on pistons and cylinders.

May the Simplex Piston Ring distributor in your community, who has a sound mechanical background, put these facts before you as a reputable business man who can show you a short cut in your shop time and one who is willing to assume the burdens of possibly one of your biggest worries?

Some exclusive franchises for distributing Simplex Piston Rings in communities from 1,000 to 100,000 population are still available for men now in the automotive industry who can devote enough time and effort to properly sell Simplex Rings, and instruct the trade as to their use.

The Simplex Piston Ring Company, a reputable manufacturer, amply financed, will vigorously prosecute any and all infringers on their rights, this to include Manufacturers, Sellers and Users.

Simplify With Simplex Piston Rings Be sure you get them

The Simplex Piston Ring Co.
1966 East 66th St., Cleveland, Ohio



ELECCIENT BALLOON SHOCK ABSORBERS





Beginning with the March 6th Issue, Lincoln Shock Absorber Advertising will appear regularly in the Saturday Evening Post.

> Dealers and Jobbers: The dealer holding a Lincoln Sales Franchise in 1926 is going to have a mighty prosperous year. Write or wire today—let us prove it to you.

> Lincoln Products Company 2649 N. Kildare Ave. Chicago, Illinois



MAYO

GARAGE EQUIPMENT

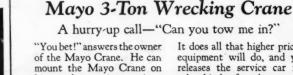
Nationally distributed by David Lupton's Sons Company 2631 Woodward Avenue · Detroit

ou'll find these Mayo Tools as practical and as handy as a pair of pliers—and a lot more profitable. More profitable because they enable you to turn out many jobs which you can't undertake with ordinary tools. Mayo Tools are tough tools for tough jobs. They're designed by mechanics for mechanics and will operate satisfactorily through years of hard usage. Ask your jobber to demonstrate 'em.



Mayo No. 4 Press

Straightening an axle shaft with the Mayo No. 4 Press held in vise. Here's the most usable tool in your shop to press gears on or off wheels or clutch hubs. Price \$30.

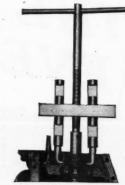


of the Mayo Crane. He can mount the Mayo Crane on his regular service car in a jiffy, tow in any wreck on the road, and have his service car free again for other uses, two minutes after he's back in the garage.

The Mayo Crane is a better buy than any other on the market today because of itsquick demountability.

It does all that higher priced equipment will do, and yet releases the service car for other kinds of work.

Specifications: Breaking strength of boom 12 tons. Pin construction permits quick assembly and take-down of boom. Drum:—5 inches diameter. Speed and power lift, operated from either side of truck. Price with Carry-



No. 1 Gear Puller

Over 95% of any shop's gear pulling work is quickly handled with these Mayo Tools. Mayo No. 1 Gear Puller shown above puls a 4-ton pull on any gear between 2" and 7" diameter, and with its interchangeable feet, is easy to use in cramped corners. With 2 sets of feet, Price \$9.75.



No. 2 Gear Puller

Above, Mayo No. 2 Gear Puller for use on small timing gears, generator gears, and similar small jobs. It's a junior model of No. 1, and handles all gears from 1½° to 4° diameter. Complete with 2 sets of feet, \$7.50.



The Mayo 3-Ton Wrecking Crane tows any wreck on the road-demountable from service truck in 2 minutes.

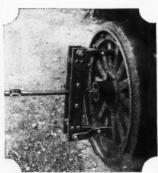


No. 3 Gear Puller

You can get a square pull on all gears 1½ to 10° in diameter, with the new Mayo No. 3 Puller, due to its newly-designed spreader arms. With special sleeve, it'll exert a 10-ton pull on drive pinions, something no other available tool will do. Price complete, \$19.75.

David Lupton's Sons Co., Distributors
2631 Woodward Avenue, Detroit, Mich. USI Woodward Avenue, Detroit, Mich.

DSend full description of the following Mayo
Tools:



Pulling a Wheel

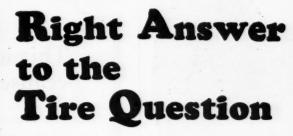
Pulling a truck wheel. By simply reversing the arms of the Mayo No. 4 Press, it's good for heaviest pulling work. With a capacity of 10 tons this practical, portable Press will make you money on many kinds of jobs.

Mayo No. 4 Press



On a Fly-Wheel

View shows the Mayo Press in operation on clutch and fty-wheel. Every mechanic can own and use this all-around Mayo No. 4 Press—Price \$30.



CORD

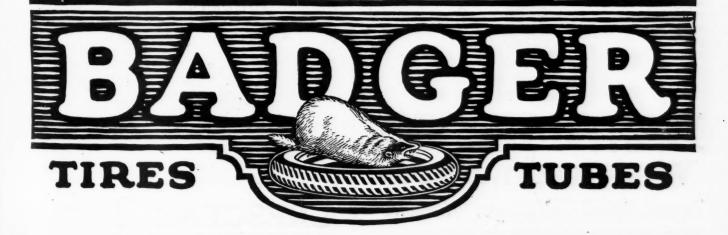
IF you have experimented with a line of tires that has not proven satisfactory — take another chance and try

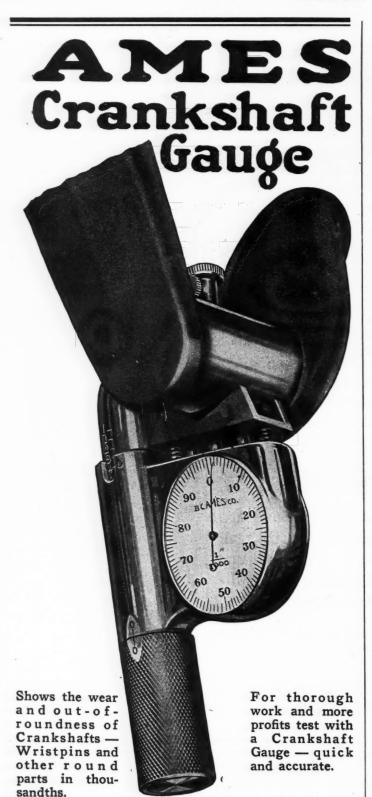
Badger

Dealers almost everywhere are most enthusiastic over its fine quality, unusual serviceability and business building possibilities. It's profitable, too.

Dealer trade supplied through leading Jobbers.

The Badger Rubber Works
Milwaukee, Wisconsin

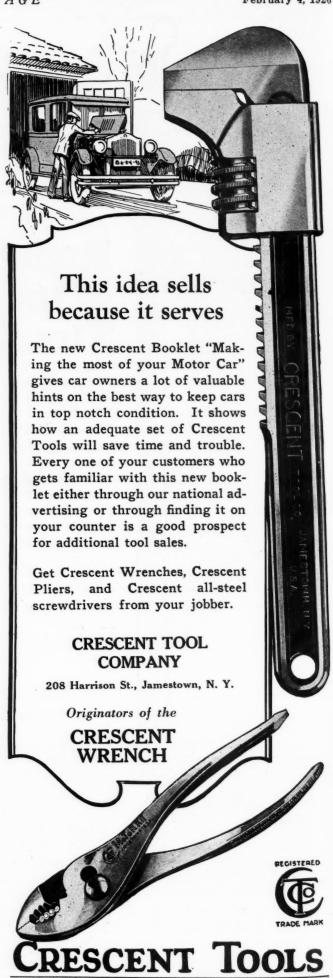


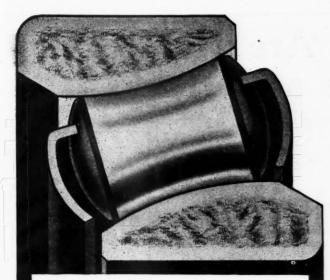


Buy from your Jobber or send for folder

B.C.AMES CO. Waltham, Mass.

"Largest Makers Dial Gauges in the World"



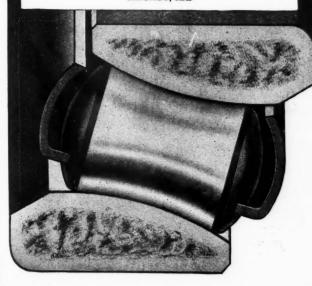


SHAFER **Self-Aligning** ROLLER BEARING

"Extraordinary Good Service"

Thus a prominent distributor of motor cars expresses his experience with over 2000 cars equipped with the Shafer Self-Aligning Roller Bearing.

SHAFER BEARING CORPORATION
6501 West Grand Avenue
CHICAGO, ILL





CADILLAC CUSTOM BUILT CARS

This, together with the fact that Anderson Spring Covers are being recommended and sold through the Accessory Divisions of

CADILLAC
PACKARD
PIERCE-ARROW
LOCOMOBILE
FRANKLIN
AUBURN

and other cars

not only raises them from the rank of ordinary accessories to that of worthwhile equipment, but it shows the trend of critical engineering thought.

Anderson Spring Covers—tailored to fit—are made in Standard Leather, Special Leather and in Leatherette for all of the more popular makes of cars.

Please address your communications to

Anderson Manufacturing Company

1934 Revere Beach Parkway

Everett, Mass.

Winter Months Are Hardest on Automobiles and Trucks



and the demand for re-conditioning motors is heaviest — INSURING BIG EARNINGS to shops equipped with a

Simplicity

Portable Cylinder Reborer and Grinder

A 4-cylinder block can be perfectly ground in 2 hours' time on a Simplicity!

Why don't you install a Simplicity in your shop? Write for our easy payment plan.

Kenwood Park, Ia. Simplicity Mfg. Co., Port Washington, Wis.

Gentlemen:

It may be interesting to you to learn that I have been operating my Simplicity Grinder as a grinding station only, doing no other work on automobiles. I have ground 63 blocks in less than a year and I am sending you my last payment. All money sent has been earned with my Simplicity.

Yours truly, J. S. LINDSEY.

SIMPLICITY

MANUFACTURING COMPANY

110 Spring Street

Wisconsin

Port Washington

Garage Mechanics with sales ability and \$250 capital wanted in our sales organization

There are Profit Making Ideas in Every Issue of

MOTOR AGE

Many subscribers of MOTOR AGE, who realize the value of its contents each week, route every issue regularly through their places of business to all departments.

As a means of business building this is a profitable habit to encourage, both for the benefit of the organization and its individual members. It is always best to read MOTOR AGE every week.

MOTOR AGE

5 SO. WABASH AVE.

CHICAGO, ILL.



"If You Don't Believe in Signs"—

Go into any garage while they're putting a K-D through its tricks and watch how this efficient little tool speeds up a valve grinding job. One squeeze of the handles and the valve spring goes up, locks at the right height, and leaves operator free use of both hands. Why, the time saved on just one eight-cylinder job will pay for a K-D—"The Perfect Parallel Lift."

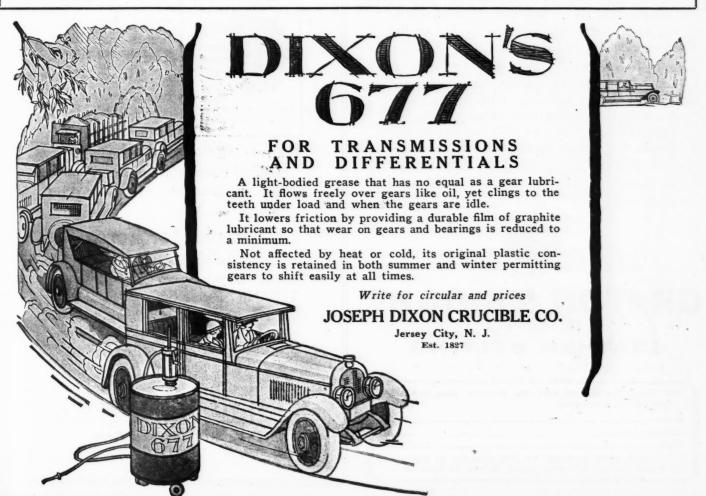
If you're a service station manager you know how many of the tickets are labelled "valves ground." If one K-D saves money, two will save twice that much. How many can your shop use?

UNIVERSAL TYPE

with Two Extra Jaws—Price \$2.50. This model K-D fits practically all L and T Head Motors. However, there are special jaws at \$1.00 per pair that are "tailored to fit" any car you service. If your jobber can't supply you, write us direct.

K-D MANUFACTURING CO.

Lancaster, Penna.



A look at his stock records convinced Daly that he was passing up a bet

Tom Daly was another dealer who claimed fan belts were too small an item to bother with. He only carried them because he had to—until we got him to check up his stock record to see how many he sold last year.

The figures opened his eyes. They showed him Graton & Knight Belts were selling easily and steadily. That they kept moving even without being displayed and without any sales effort.

Today Daly gives his Graton & Knight Belts a chance to show what they really can do in a sales way. He uses the handy display rack that is an invitation to buy. With our quick turnover system he carries endless belts for the more popular cars only. Roll belting, which can be cut to fit, for the others. Less stock—smaller investment—increased returns.

Graton & Knight Fan Belts are made of tough, long-wearing leather, tanned to resist oils, dust, water and heat. Grip tightly at low tension. Easy on bearings. Stay put. In any type—Flat, "V" or Link "V"—they guarantee service that pleases your customers.

Send in the coupon and let us show you how to make your fan belt business increasingly profitable.



GRATON & KNIGHT

LEATHER BELTING

THE	GRATON & KNIGHT MFG. CO., Wereseter, Mass., U. S. A. and fan belt information:
Name	······································
Comp	oany
Place	\
	Prices, quality for quality, 5 to 10% lewer than the field



Good Springs Build Confidence

Tuthill TITANICS are the result of forty-six years of quality spring building. Only the finest alloy steel is used in the making of TITANICS. Each leaf is given the correct heat treatment, shaped in Tuthill-designed machines and carefully fitted.

The assembled TITANICS are then given a rigid test and inspection



The Sign of Dependable Spring Service before they are ready for shipment. That's why Tuthill TITAN-ICS—with a hump instead of a center-bolt hole—are guaranteed

forever against center breakage.

Liberal discounts and exceptional dealer co-operation in sure your profit.

Titanics for Fords

Unbreakable because of the famous hump center, Tuthill TITANIC Front Springs for Fords last a lifetime. They provide greater riding comfort and freedom from spring worries.

Write for Tuthill Service Station Plan

Tuthill Spring Co.

Dept. 279—760 Polk Street Chicago Illinois



EIGHT TIMES CITY WATER PRESSURE

Operating at 300 lbs. pressure, about eight times the pressure of city water, the Hardie Car Washer cleans quicker and better in one-fourth the time.

Thus installed wherever car washing or Pyroxylin painting is done, the Hardie brings increased business and larger profits thru less labor, and increased business due to a more satisfied trade.

There is a Hardie washer for every shop in this country, from a town of 500 to the city of millions. It is the ideal washer for the garage, auto laundry, taxicab company or fleet owner.

Made in six sizes, from one to eight guns, and sold at a most reasonable price.

Hardie high pressure washers require no air compressors, mixing vats, etc. There is nothing to regulate. Simple, practical, effective, powerful. Can be used with any soap or cleansing solution. Electrically driven on either AC or DC current. Occupies very little floor space.

A Real Money Maker and Money Saver

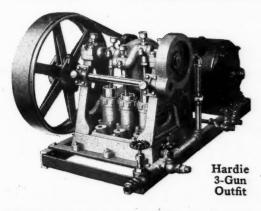
For Sale by Leading Automotive Jobbers Everywhere

Manufactured by

HARDIE MFG. CO., Hudson, Mich.

Canadian Branch: Petrolia, Ont. Western Factory: Portland, Ore. Los Angeles Branch: 22 N. Los Angeles Street. New York Office: 1780 Broadway.

HARDIE CAR WASHER



get this BOOKbe ready for greater Spring profits!

It's going to be a whopper of a year for repair men. Over 18 million old cars are going back to the road, and they'll need going over. There'll be a pile of money spent for repairs.

That's where this book comes in. It tells how the Stormizing Process enables any shop, regardless of size, to handle jobs that show more profit than any other motor repair work. After you have seen this book, you'll understand why your shop cannot well afford to pass up cylinder work. You'll see that the Stormizing Process eliminates expensive bulky machines. Stormizing is simple—it does a factory job that you can positively guarantee, and any mechanic can do the work.

Don't pass up this extremely profitable business this year. Find out about Stormizing—find out how easily your shop can be equipped to handle a perfect cylinder reconditioning job. The book doesn't cost you a cent—it may start you toward the biggest money making season you ever had.



Storm MFG Co.IRG.

406A SIXTH AVE., S., MINNEAPOLIS, MINN.

I want full information on Stormizing. Send me the book, "Stormizing as a Business and a Process."

Name	
City	State



CANTON

Portable Crane and Hoist

The purpose of the Canton Portable Crane and Hoist is to make more money for service and repairshop men.

Write for a copy of the illustrated booklet M A describing the outfit. It will show you the way to better profits.

The Canton Foundry & Machine Co. Canton, Ohio

New York Office-303 East 15th Street

A New Chapter Every Thursday

Each issue of MOTOR AGE is a new chapter, continuing the story of the development of the industry.

And for those who apply the new ideas it gives them, it also continues the story of the development of their individual success. Read MOTOR AGE every week.

OTOR AGE

5 So. Wabash Ave.

Filters all dust, sand and grit out of air supply to carburetor and motor. Write us for facts. STAYNEW FILTER CORPORATION Rochester, N. Y.

Chicago, Ill.

Protect the Oil-Grooves

bushings with FULL spiral fluted SMOOTH-KUT e full spiral causes a continuous shearing action that d can't hurt the oil-grooves.



Patented April 7, 1925.

SMOOTH-KUT are the only full-spiral expansion reamers made. They are guranteed, and reground by us at cost. Studebaker, Velte, Franklin, Lycoming, Muskegon and others use SMOOTH-KUT in production. As a finishing tool for the Piston pin hole. Your jobber can supply them singly or in sets, ASK FOR THEM BY NAME as imitations are inferior products.

Millersburg Reamer & Tool Co., Millersburg, Pa.

SMOOTH-KUT EXPANSION REAMERS

(Trade Name Registered)

Magneto Windings

EFFICIEN

A Magneto is no better than its winding; you must have the best. The very finest insulation, hot spark, low speed. Beautiful rough gloss varnish finish; no better winding made. Each winding packed in individual box. ALL MODELS. Send in your Old Cores. Guaranteed.

Sevison Magneto Engineering Co. 538 Fernwood Ave., TOLEDO, OHIO

There Simply Isn't Any Better Flux Made Than Rubyfluid!



A complete substitute for dangerous acids, Zinc Chloride, Salammoniac and other mixtures commonly used as a flux. Ruby Fluid is quick acting, anti-rusting and is always ready for instant use. Ruby users include the foremost industries of the country. Send for generous Free Sample

COMBINATION. SOLDERING AND TINNING FLUX

THE RUBY CHEMICAL CO.

68-70 McDowell Street Columbus, Ohio

> Our **Engineers fill Gladly**

Your blueprints in the hands of our engineers will assure you prompt and accurate information on your Angular Contact Thrust Bearing, Angular Contact Radial Bearing, and Thrust Ball Bearing requirements

THE BEARINGS COMPANY OF AMERICA, Lancaster, Pa. Western Sales Office, 1012 Ford Bldg., Detroit, Mich.

The Motor Necessity That Has Made Good Backed by Seven Years' Satisfactory Service

THE WEL-EVER PISTON RING CO., TOLEDO, OHIO Sold most everywhere. If your dealer cannot supply you write us.



Any Motor Will Run Better With of

Splendid Profit, No Servicing
There is only one Winterfront. It is made by Pines.
Distributors have stock for immediate delivery.
Write factory for name. Pines Winterfront Co., 412 N. Sacramento Blvd., Chicago



Always Insist Upon Genuine Apex Innerings

Most good Jobbers stock them If it isn't an Apex-It isn't an

THOMSON MFG. CO.
Dept. C Peoria, III.

the world's best known fan belts.

L. H. GILMER COMPANY, Tacony, Philadelphia, Pa.



New!



"Twin" Assortment Cotter Pins and Lock Washers

In a Handy, 2-Screw-End Container

Cotter Pins in one end, Lock Washers in the other. A double screw-lid can, divided in the center by a permanent partition. Contents always separate, no danger of mixing, easily located, container being fully labeled.

The "Twin" Assortment consists of approximately 100 Cotter Pins—sizes ranging from 1/16" x ½" to 5/32" x 1½"—50 Lock Washers, Bolt sizes from 3/16" to %".

Complete line of Lock Washers and Cotter Pins in standard packages and assortments.

Ask Your Jobber for the W. W. Line.

TOTAL TOTAL PROPERTY OF



Why Dealers Find

The Mallory IGNITION COIL



So Attractive

More Mallory Coils are being sold today than veterans of the ignition business dreamed possible. This is due to the fact that The Mallory created its own market—a new market. While the replacement business is of quite some magnitude, garage and service station men have discovered that the owner of every car is a real prospect as this ignition coil will give new life to any machine. It will start any car regardless of temperature.

The Mallory Electric Corp.
Factories Building Toledo, Ohio

A Continued Story of the Industry

READING MOTOR AGE every week is very much like following the growth of the automotive industry in story form.

It is as interesting as a fiction serial, and instructive to the point of making better and more prosperous dealers.

Reading MOTOR AGE every week when it comes, assures subscribers that they will stay up to date and profit accordingly.

MOTOR AGE

5 So. Wabash Ave.

Chicago, Ill.

Display



Sales Come Fast

Yavapai Onyx Gear Shift Balls are one of the things people buy because they like their looks. That's why it's so profitable to keep them on display.

Their quick turn-over makes them particularly profitable to stock.

Ask your jobber, or write us direct giving his name

YAVAPAI ONYX MINING CORP.

Automotive Division

Dubuque, Iowa

U. S. A.

L & S VIBRATION ELIMINATOR

(PAT. PENDING)

makes OVERLAND FOURS quiet Vibrationless

MAKE US PROVE IT-WRITE LA MERE & SARDESON, INC., Mfrs. 1900 CENTRAL AVE. — MINNEAPOLIS, MINN.



Install the

Gill Combination of Piston Rings

and in each 6 cyl. job make \$3.20 instead of the usual \$1.80.

This free booklet tells been This free booklet tells how.

The Gill Mfg. Co., 8300 So. Chicago Ave., Chicago

The SO-LO JACK

PIRMO

NON-EVAPORATING ANTI-FREEZE COMPOUND

ONCE EVERY WINTER

One filling protects radiator from freezing all winter long.

BOYCE & VEEDER CO., Inc., Long Island City, N. Y., U.S.A.

\$6.00 Retail

4%" LOW—HIGH 15%"

(Working Range 5":15%")
The REAL Balloon Tire Jack
All Steel Construction
POWERFUL—STURDY—EASY TO OPERATE
A Sure Seller with your Trade

SO-LO JACK CO., Inc. Commonwealth Ave., Boston, Mass.

The C. A. ADJUSTABLE CENTER BEARING CAP corrects Ford crankshaft end play and sets magneto for highest efficiency without removing the motor. Beality and quickly installed. Guaranteed for one year. List price \$3.75. Ask your jobber or dealer or write us direct.

ADJUSTABLE BEARING CO., Inc.



Valve Face Grinding Machine

Before you buy any valve grinding machine it will pay you to investigate the "Sioux." Nothing like it!

Ask Your Jobber About It.

Albertson & Co.

Sioux City, Iowa



gasoline gauge on the Dash. Note full page ad in ors in February 11th issue of Motor Age, also half e in Saturday Evening Post, February 20th. Write description and proposition to the trade.

KING-SEELEY CORPORATION 298 Second Street

SPECIALTY SALESMEN

Sell the Dieringer Bushing Remover. Mechanics buy these tools on sight. Six sizes \$4.50. Liberal discount to hustlers.

E. T. DIERINGER Box 282 Bolivar, Ohio

Transmissions and Clutches



Trucks, Busses Passenger Cars

QUICE SERVICE ON COMPLETE UNITS OR PARTS

Brown-Lipe Gear Co

SURACUSE, N. U.



Millions of feet annually installed as factory equipment

THE MANHATTAN BURBER MFG.CO. PASSAICN.J



"Made to Blue Print"

guarantees to the Replacement Trade the same high standard of Quality and Accuracy de-manded by the car manufacturer.

The Fostoria Screw Co., Fostoria, Ohio



fit behind piston rings and keep them in perfect contact with the cylinder walls at any motor speed or temperature.

RAMSEY ACCESSORIES MFG. CORP., ST. LOUIS, MO.



Dept. M.

Built by the oldest maker of Portable Electric Drills in the World.

Catalog 105 THE UNITED STATES ELECTRICAL TOOL CO. Cincinnati, Ohio, U. S. A.

NEXT WEEK

is the time to read next week's issue of MOTOR AGE, as you are reading this week's issue this week.

MOTOR AGE

5 So. Wabash Ave.

Chicago, Ill.



CRANE Wheel and Gear Pullers

CRANE PULLER COMPANY South Deerfield, Mass.

They Won't Come Back

Those jobs won't come back showing oil passing, compression loss and crank-case dilution if you use a Hall Hone. The Hall makes cylinders both round and parallel. Ask your jobber.

THE HALL MFG. COMPANY 502 Hall Bldg., 1600-06 Woodland Ave. Toledo, Ohio

GATES VULCO

Fan Belts and Radiator Hose

Made By The World's Largest Makers of Fan Belts



QUALITY—PROFIT—TURNOVER

American Hammered Piston Rings

American Hammered Piston Ring Company Baltimore, Maryland

PUMP for FORDS

Sold Everywhere NIMS PUMP CO. STOCKTON, CALIF.

Eastern Office & Warehouse, 201 No. Broad St., Philadelphia



The Allen Manufacturing Company, Hartford, Conn.

HERE is highest radio quality at lowest price-Complete Delano line.

The Delano Sheraton sells for \$75—has built-in Delano 'loud speaker—5 tubes—special Delano hook-up and mahogany cabinet that completely encloses entire set. Wire or mail

Modernola Co., Inc. Johnstown, Pa.

Gentlemen: Please send me full details.

Name

DELANO RADIO







More Power Less Fuel

Zenith - Detroit Corporation, Detroit, Mich.

Cash in on This Profit Maker! PEDAL PANTS

ME DURKEE ATWOOD



KISSE

CUSTOM (2) BUILT Kissel Motor Car Co., Hartford, Wis.

PROTEX TIRE CHAINS

Protex Chain Co., Inc. Waynesboro, Pa.

Absolutely Stop Skid Many small horseshoes grip the road and prevent slip. The first scientific and prevent slip. anti-skid device.

CLASSIFIED ADVERTISING

Sets

PARTS

AUTO PARTS

SAVES 50% TO 75% ON ALL CARS

and Used Gears—Springs and Axles—Cylind Motors—Rear Systems, etc. Wire or Write

INDIANA AUTO PARTS CO. 108-10 N. CAPITOL AVE., INDIANAPOLIS, IND. LARGEST CAR WRECKERS IN INDIANA

HOUSE OF A MILLION **AUTO PARTS**

The largest stock of new and used car and track tris in the world. We have everything. Always ention model and serial number in order. Write All inquiries answered promptly. DOUGLAS AUTO PARTS CO., INC. 2003-5-7-9 South State St., Chicago, Ill.

PATENTS & PATENT ATTORNEYS

MILO B. STEVENS & CO., Registered Patent Aftorneys Offices: 639 F St., Washington, D. C. 10 Monadnock Block, Chicago, III.

....... Attorney-at-Law and Solicitor of Patents C. L. PARKER

Formerly Member Examining Corps, United States Patent Office

American and foreign Patents secured. Searches m to determine patentability and validity. Patent s conducted. Pamphlet of instruction sent upon requ

McGill Building, WASHINGTON, D. C.

FOR SALE

.......

FOR SALE—Rotary valve mechanism patents No. 1,152,763, No. 1,189,625. Sole owner, Floyd T. Romberger, 501 Lafayette Life Bldg., Lafayette, Ind.

HELP WANTED

WANTED-Replacement parts salesman. Large manufacturers of well-known nationally advertised line of replacement parts wants live salesman for Missouri and Mississippi Valley Territory. Must be acquainted with both old line and parts jobbers and dealers. Address Box 6259, Motor Age, 5 S. Wabash Ave., Chicago, Ill.

CAR WANTED

WANTED-Roamer-Duesenberg Four, chassis or car. Must be cheap. Give full details in answering. Address Box 6260, care Motor Age, 5 S. Wabash Ave., Chicago, Ill.

BUSINESS OPPORTUNITIES

GARAGE FOR RENT-On Yellowstone Trail and main entrance to Yellowstone National Park. Excellent tourist location, Address C. H. Hefferlin, Livingston, Montana.

LaM

Lupt

Lyon

Malle

Mille: Co. Mode

New Nims

Peerle

Prest-

Quincy

Ruby

.130

K-D Mfg. Company.......76 & 77-125

Kawneer Co., The

King-Seeley Corp. ...

Kissel Motor Car Co

GEAULSteel The Complete Line of Office Equipment

Allsteel Safes

YOU can insure many things—but the best insurance will never replace your business records.

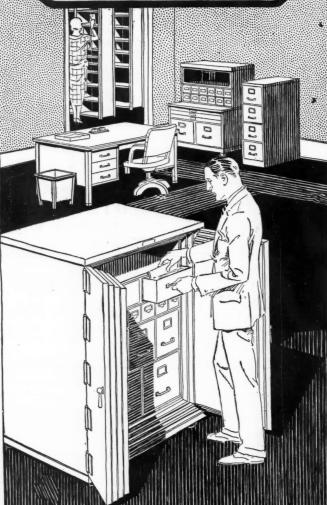
GF Allsteel Safes, tested and approved by the Underwriters' Laboratories, have brought their contents, uninjured, through countless severe fires.

The Allsteel mark on office equipment is your guarantee of permanent satisfaction.

Write for a copy of the GF book: "Safeguarding the Vital Records of Business."

THE GENERAL FIREPROOFING CO. Youngstown, Ohio

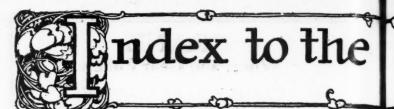
Dealers Everywhere . Canadian Plant: Toronto, Ontario



Attach this coupen to your firm letterhead

The General Fireproofing Co., Youngstown, Ohio
Please send me without obligation a copy of your book "Safeguarding the Vital Records of Business."

Records of Business.		
Name		***************************************
Firm		***************************************
Street No		
City	Sta	ta



The Advertisers' Index is published as a convenience and not as a part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

A. C. Spark Plug CoBack Cover	Eaton Axle & Spring Co 92	
Adjustable Bearing Co., Inc130		
Ahlberg Bearing Co130		
Akron-Selle Co., The 3		
Albertson & Co130	Fisk Tire Co	
Allen Mfg. Co131	Fostoria Pressed Steel Co 4	
Amer. Hamm. Piston Ring Co. 131	Fredericks, H. M., Co	
Amer. Tel. & Tel. Co110		
Ames, B. C., Co122	Fulton Co., The86 & 87	
Anderson Mfg. Co123		
Arrow Head Steel Products Co94 & 95 Automobile Equip. Mfg. Corp134	Gabriel Mfg. Co	
	Gates Rubber Co131	
Badger Rubber Works, The121	Gemco Mfg. Co	
Bearings Co. of America128	General Fireproofing Co132	
Black & Decker Mfg. Co	Gill Mfg. Co130	
2nd Cover	Gilmer, L. H., Co128	
Bock Bearing Co., The 8	Graton & Knight Mfg. Co126	
Bosch, Robt., Mag. Co130		
Boyce & Veeder Co., Inc130		
Broderick & Bascom Rope Co112	Hall Mfg. Co., The131	
Brown-Lipe Gear Co130	Hardie Mfg. Co127	
Brunner Mfg, Co, 69	Hayes Wheel Co103	
Budd Wheel Co 83	Hutto Engineering Co115	
Bunting Brass & Bronze Co114		
Canton Foundry & Mach. Co128	Illinois Brass Mfg. Co102	
Chevrolet Motor Co 65	Indiana Piston Ring Co 2	
Cincinnati Victor Co 80		
Classified Advertising Section131		
Crane Puller Co131	Johns-Manville, Inc81 & 82	
Crescent Tool Co122		
Cupples Co., The74 & 75	Jordan Motor Car Co,Front Cover	
Curtis Pneumatic Mach. Co111		

..130

Dieringer, E. T ...

Dixon, Joseph, Crucible Co......125

Durkee-Atwood Co.131

98 87

71 131

72

.131

...102

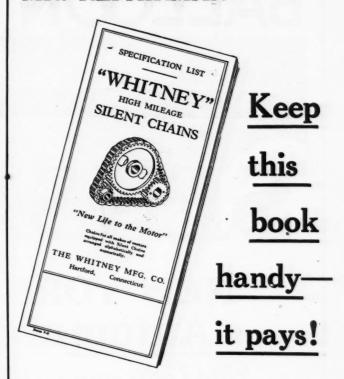
& 82

Advertisements

LaMere & Sardeson, Inc130	Sevison Magneto Eng. Co128	
Lincoln Products Co119	Shafer Bearing Corp123	
Lupton's Sons, David, Co120	Shaler, C. A., Co84 & 85	
Lyon Metallic Mfg. Co104	Simplex Piston Ring Co., The118	
	Simplicity Mfg. Co124	
	So-Lo Jack Co., Inc130	
	Staynew Filter Corp128	
Mallory Electric Corp129 Manhattan Rubber Mfg. Co130	Stewart-Warner Speed. Corp	
	Storm Mfg. Co127	
Marmon Motor Car Co3rd Cover	Studebaker Corp., The 5	
Millersburg Reamer & Tool Co128	Stutz Motor Car Co 6	
Modernola Co., Inc		
Moon Motor Car Co		
Murray Rubber Co113	Thermoid Rubber Co90 & 91	
	Thomas, W. H., Mfg. Co 73	
	Thomson Mfg. Co128	
	Timken Roller Bearing Co.,	
New Departure Mfg. Co105	The 7	
Nims Pump Co131	Tuthill Spring Co126	
Oakland Motor Car Co100 & 101 Owen-Dyneto Corp116	U. S. Elec. Tool Co130	
	Vesta Battery Corp106	
Packard Electric Co131		
Paige-Detroit Motor Car Co107	Walden Co., The108 & 109	
Peerless Motor Car Co66 & 67	Weaver Mfg. Co1	
Pines Winterfront Co128	Welever Piston Ring Co128	
Prest-O-Lite Co., Inc., The 68	Western Wire Products Co129	
Protex Chain Co., Inc131	Whitney Mfg. Co., The133	
	Williams, J. H., Co 97	
	Willy-Overland, Inc88 & 89	
	, 200	
Quincy Compressor Co 93		
	Yavapai Onyx Mining Corp129	
Ramsey Acc. Mfg. Corp130		

Ruby Chemical Co., The......128 Zenith-Detroit Corp.

MR. REPAIRMAN



EVERY
TIME YOU REPLACE WITH



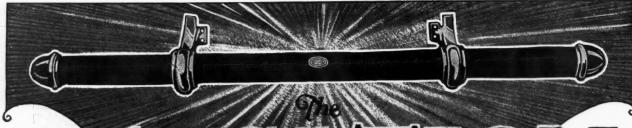
You make one more satisfied customer.

He will not need another timing chain, of course, but he will not forget you when he needs other service.

Ask Your Jobber

THE WHITNEY MFG. CO. HARTFORD CONN.

BALLOON BUMPERS



SENSATION

NEW YORK & CHICAGO Automobile Shows

The Only and Original Balloon Bumper

"They copied all they could follow, But they couldn't copy my mind, And I left 'em sweatin' and stealin' A year and a half behind."--Kipling

2







The tremendous interest in the Balloon Bumper at the New York Show resulted in new business of \$100,000. Present indications are that the Chicago Show will not only create a new high point of enthusiasm, but will double the figure that was already a record for any accessory manufacturer.

Tested and approved by the Insurance Underwriters for cars of all weights.

Sold by manufacturer direct to Automobile Dealers.

Full Front or Rear Bumper \$2500 each

Ō

Balloonettes for Rear \$3000 per Pair





Balloon Bumpers patented, made and sold by

Automobile Equipment Manufacturing Corporation

1908-10-12 Indiana Avenue

Chicago, Illinois

MARMON

Establishes a Used Car Division Helping Its Dealers Solve the Used Car Problem

MARMON has already established a used car division in its factory sales department.

It thus answers a question that dealers have been asking for years, "When are factories going to do something in regard to used cars?"

This is but part of the inflexible Marmon policy, "Make Marmon Men Make Money". This new division of the factory sales department is but one of many varieties of dealer helps inaugurated during the past year. Other announcements, just as unusual, may be confidently expected by Marmon dealers and the automobile trade.

Another Marmon
Policy Which
"Makes Marmon Men
Make Money"

Marmon Motor Car Co. - Established 1851 - Indianapolis, Ind.

"Its a Great Automobile"

The NEW MARMON

The well



posted

dealer concentrates his sales efforts on

AC products.



He knows that the foremost automotive engineers specify AC products as standard equipment for the very good reason that they perform best. That is the reason for their assured market. Backed by strong advertising, they are sold to motorists without sales resistance. They carry a good margin AC-SPHINX
Birmingham
ENGLAND

AC Spark Plug Company, FLINT, Michigan
Makers of AC Spark Plugs—AC Speedometers—AC Air Cleaners of profit.

AC SPARK PLUGS

THE new AC Spark Plug marks the greatest advance made in spark plug construction in years.

A new design, a new alloy for sparking points, a new electrically fused Kyanite insulator core and a new glaze - in a type and size for every motor.

For Fords there is the famous AC 1075, embodying the above improvements as well as many other special features - and it is now made in both one- and two-piece design.

AC SPEEDOMETERS

THE AC Speedometer for Fords a same high quality as furnished for original THE AC Speedometer for Fords is of the factory equipment to the manufacturers of Buick, Cadillac, Chandler, Chevrolet, Chrysler, Gray, Oakland, Oldsmobile, Peerless, Pontiac and GMC Trucks.

There is no swivel joint between the front wheel and the instrument-it drives directexclusively an AC feature, insuring continuously satisfactory service.

Packed complete with all installation attachments, easily mounted and reasonably priced.

AC AIR CLEANERS

HE AC Air Cleaner prevents dust from entering the motor through the air intake of the carburetor, thereby eliminating excessive wear on the motor's moving parts.

Original factory equipment on Buick, Davis, Locomobile "Jr. 8", Oakland, Nash, Stutz Locomobile "Jr. 8", Oakland, Nash, Stutz and Willys-Knight "6" — Models available for installation on Chevrolet, Chrysler 4, Dodge Brothers, Ford, Maxwell, Oldsmobile, Star, Studebaker, as well as the 1925 and earlier models of Buick, Nash and Oakland.

Packed complete with all installation attachments, easily mounted and reasonably priced.